

**Water Use in Indiana,  
Graphs by County and  
Water Management Basin,  
1986–2006**

**State of Indiana  
Department of Natural Resources  
Division of Water**

**Prepared in cooperation with the  
U.S. Geological Survey**

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By Donald V. Arvin, U.S. Geological Survey  
And Ralph Spaeth, Indiana Department of Natural Resources

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# **Water Use in Indiana, Graphs by County and Water Management Basin, 1986–2006**

By Donald V. Arvin and Ralph Spaeth

## **Introduction**

The Water Resource Management Act (Indiana Code 14-25-7, previously 13-2-6.1), passed by the State Legislature in 1983, mandates that owners of all wells and surface water intakes register with the Indiana Department of Natural Resources (IDNR), Division of Water if their pumping facilities have the capability of withdrawing 100,000 gallons or more of water per day (equivalent to about 70 gallons or more per minute). The law pertains to both stationary and portable pumps. Registration requirements are based on pump capacity, not actual water withdrawals. Beginning in 1996, by act of the legislature, landfill facilities were exempted from the requirement to register and report their withdrawals.

In accordance with the Water Resource Management Act, the Division of Water, since 1985, has been conducting an inventory of the state's significant water withdrawal facilities. This inventory includes information on the numbers of significant water withdrawal facilities throughout the state, along with the numbers of registered ground water wells and surface water intakes, the amounts of water withdrawn, and the pump withdrawal capacities. Withdrawal capacity is the amount of water a pump is capable of pumping, whereas a withdrawal is the amount of water a pump actually withdrew from a surface or ground

water source. Data in this water use inventory can be aggregated by category of use and also by statewide total, by county, and by Water Management Basin.

Every year, the Division of Water mails a reporting form to each registered facility. The facility owners ensure that the forms are completed and returned to the agency. The facility owner's best estimates of total monthly withdrawals for each pump are listed on the form. Reported withdrawals at some sites are based on flowmeter readings, although flowmeters are not mandated. Reported withdrawals at other sites are based on the pump capacity multiplied by the hours of pump operation. At other sites, alternative techniques are used to produce estimates of withdrawals. In 2006, there were withdrawal data for 3,518 active registered facilities.

The aggregated withdrawal data presented in this report are based on the site-specific withdrawal data reported by facility owners. The withdrawal data were entered into the Division of Water water use database after review by the IDNR personnel. Values stored in the database were quality assured by IDNR personnel for data entry accuracy, and by automated computer programs for reasonability based on pump capacity, reported pump time, and withdrawals for the previous year.

This report presents a summary of annual water withdrawals for the period of available data by showing graphs of statewide totals, graphs for each of the 92 counties, and graphs for each of the 12 Water Management Basins (fig. 1). Withdrawals are aggregated by source (ground water or surface water) and by water use category.

The intent of this report is to provide an overview of water use in Indiana. The graphs are intended to show the amounts of water withdrawn in the different geographic areas of the state, for what purpose the water was used, and how the withdrawals changed over time.

Registered significant water withdrawal facilities have been divided into six general water use categories. The categories are described as follows:

**Energy Production** facilities include those that withdraw water for the primary purpose of power generation, including coal mining operations. A major component in this category is water used for the cooling of condensers at fossil fuel power plants.

**Industrial** facilities include those that withdraw water primarily for use in the

manufacturing process, including sand and gravel operations.

**Public Supply** facilities include those that withdraw water for the primary purpose of distributing water for use by others and for use in public establishments. These facilities include water supply utilities and self-supplied mobile home parks and apartment complexes. These facilities also include self-supplied schools and other institutions that provide water for use by the general public.

**Agricultural** facilities include those that withdraw water for the primary purpose of irrigating crops or golf courses, dewatering farm sites and fields, and other similar agricultural practices.

**Rural Use** facilities include those that withdraw water for the primary purpose of watering livestock and operating fish hatcheries.

**Miscellaneous** facilities include those that withdraw water for a variety of other uses, including snow-making, operating fish and wildlife areas, lake-level maintenance, and construction dewatering. Landfills were included in this category through 1995, and then were exempted from the registration and reporting requirement beginning in 1996.

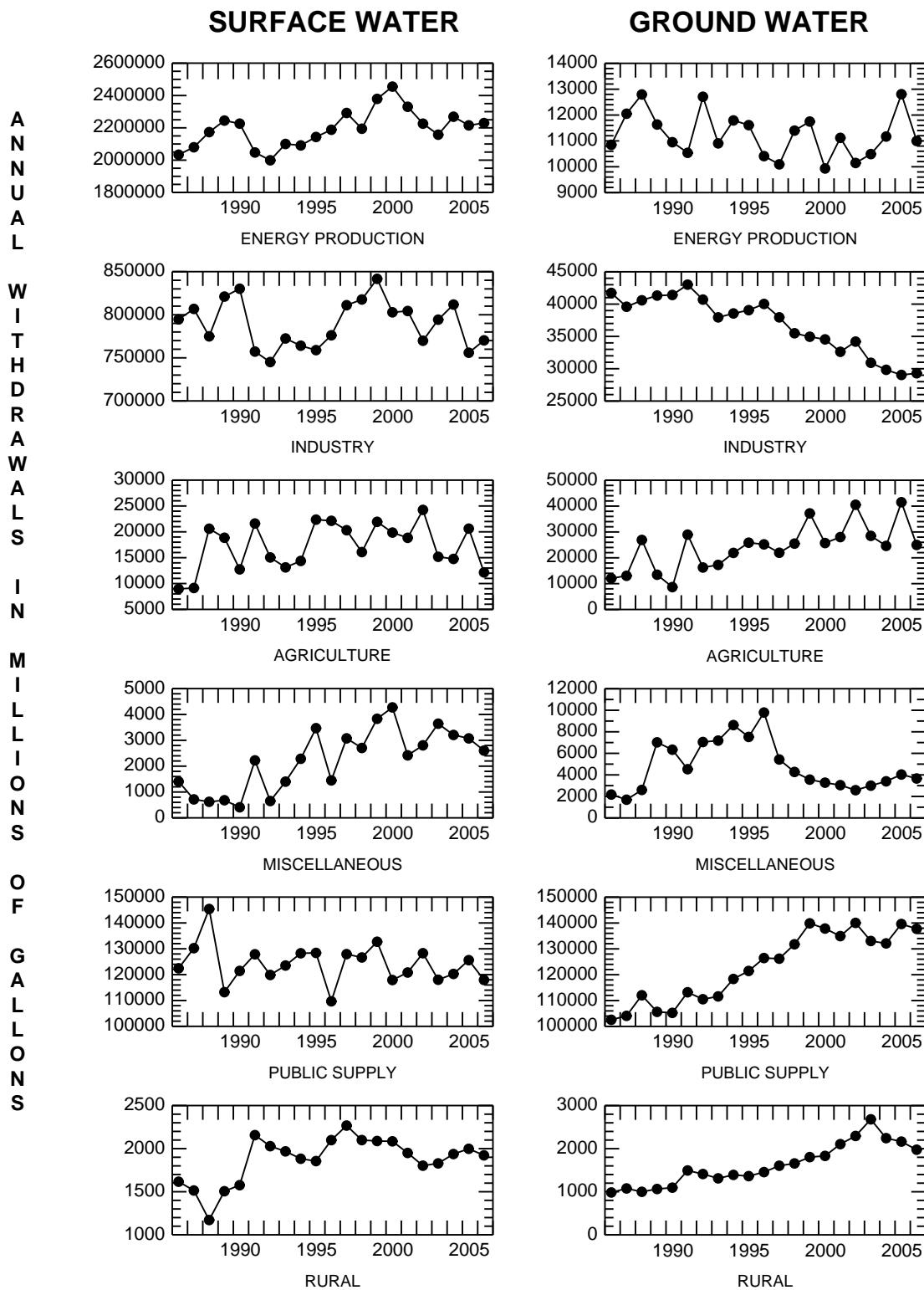


Figure 1. Indiana counties and Water Management Basins.

# **Statewide**

# **Data**

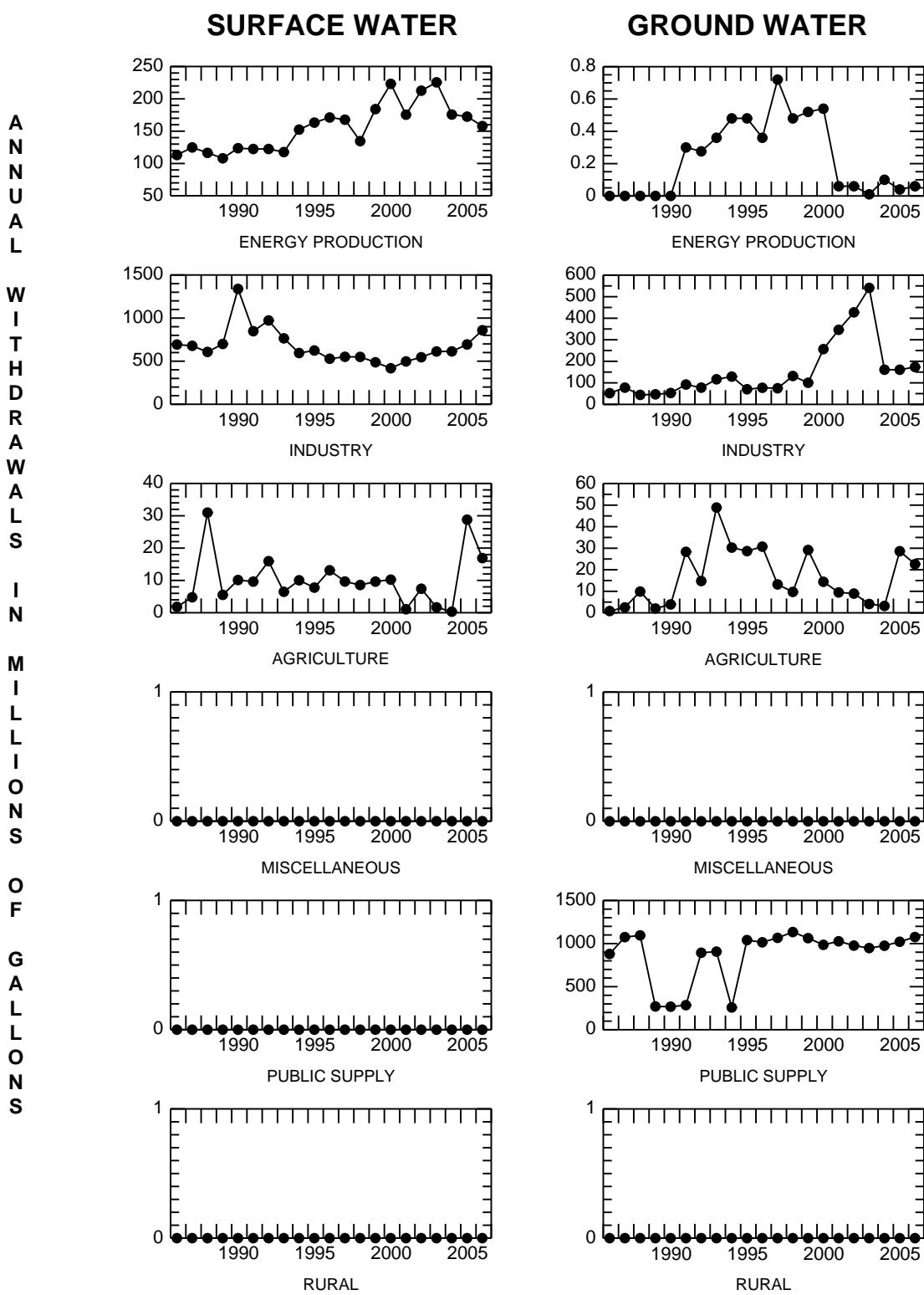
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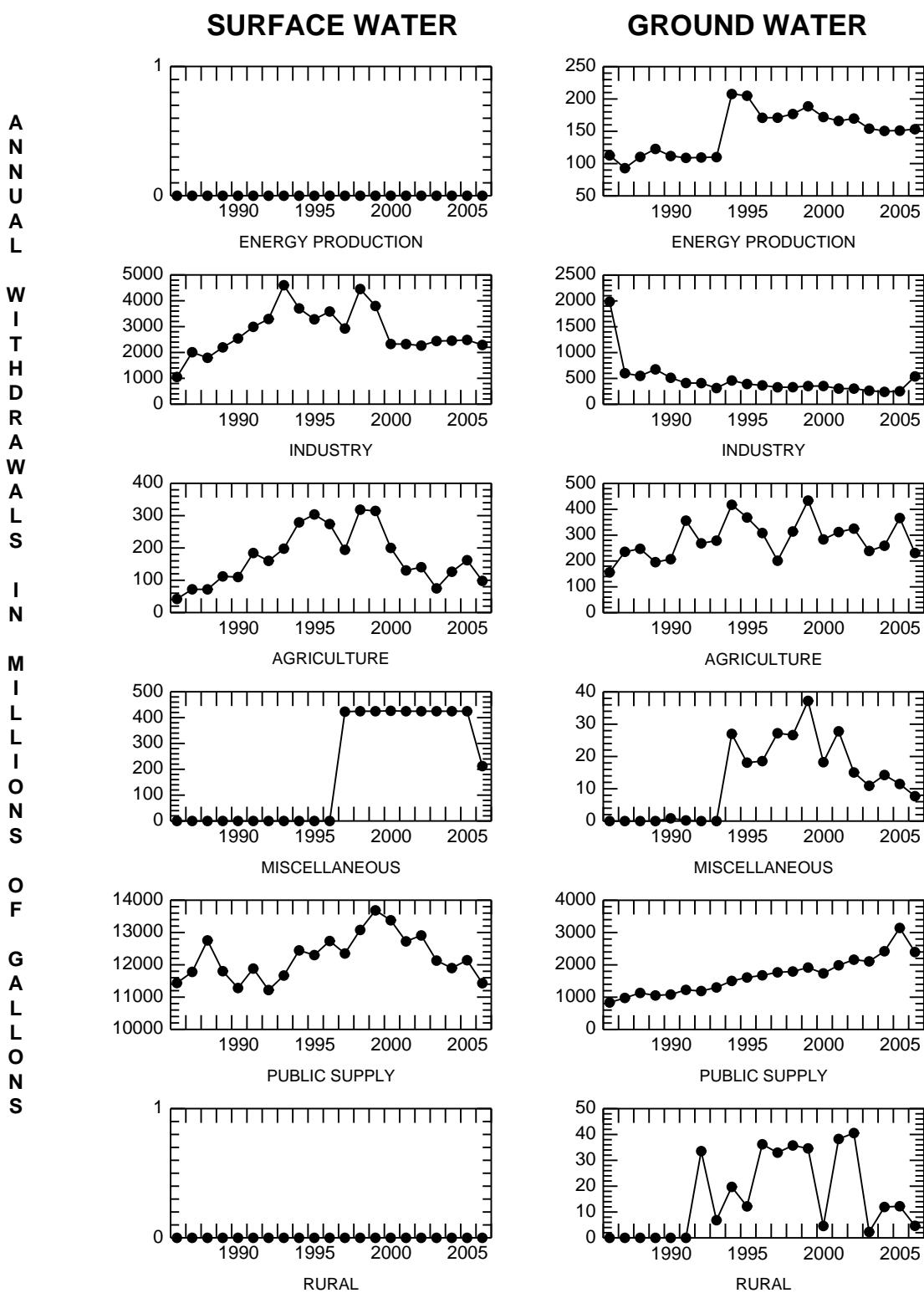
# **County**

# **Data**

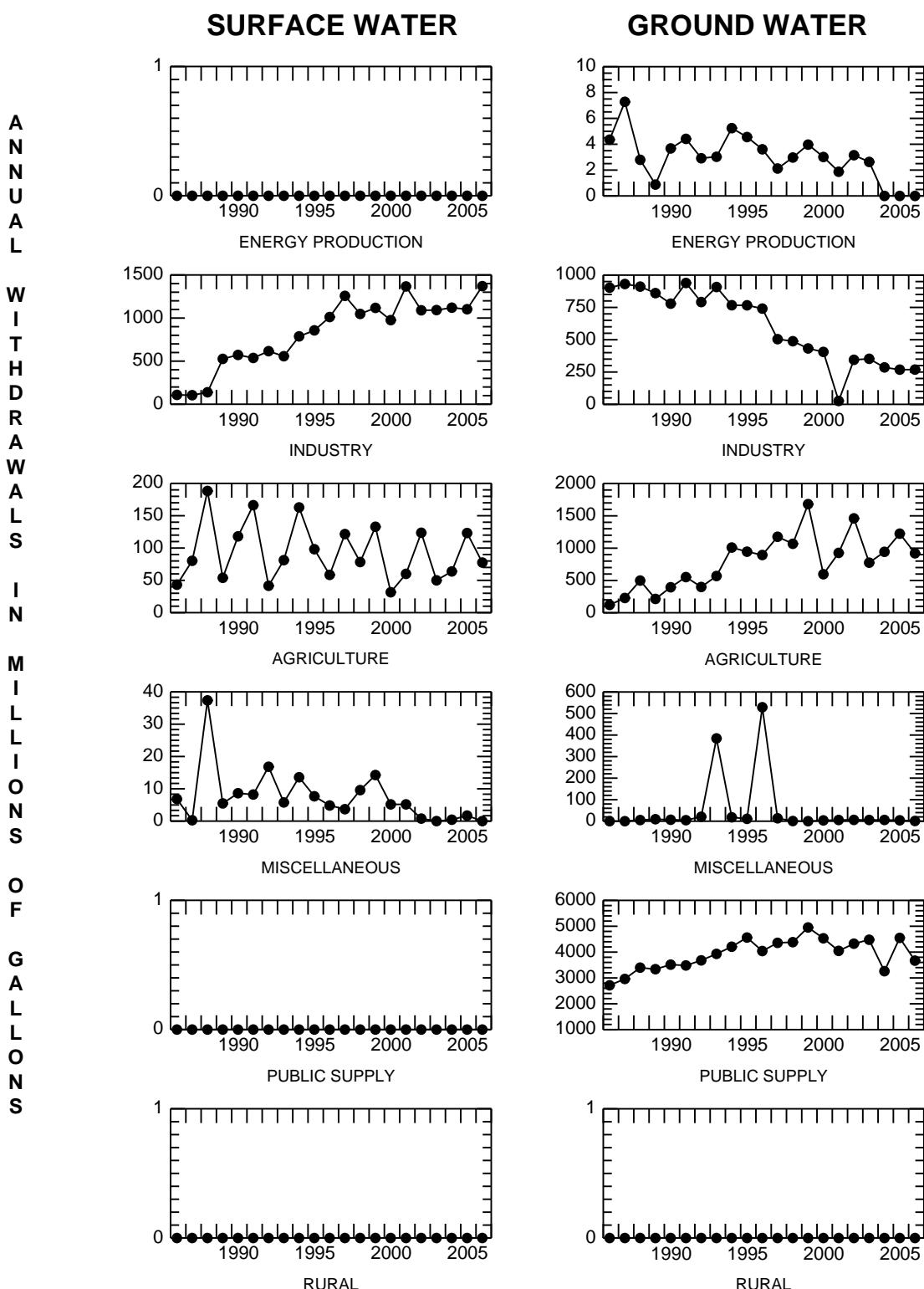
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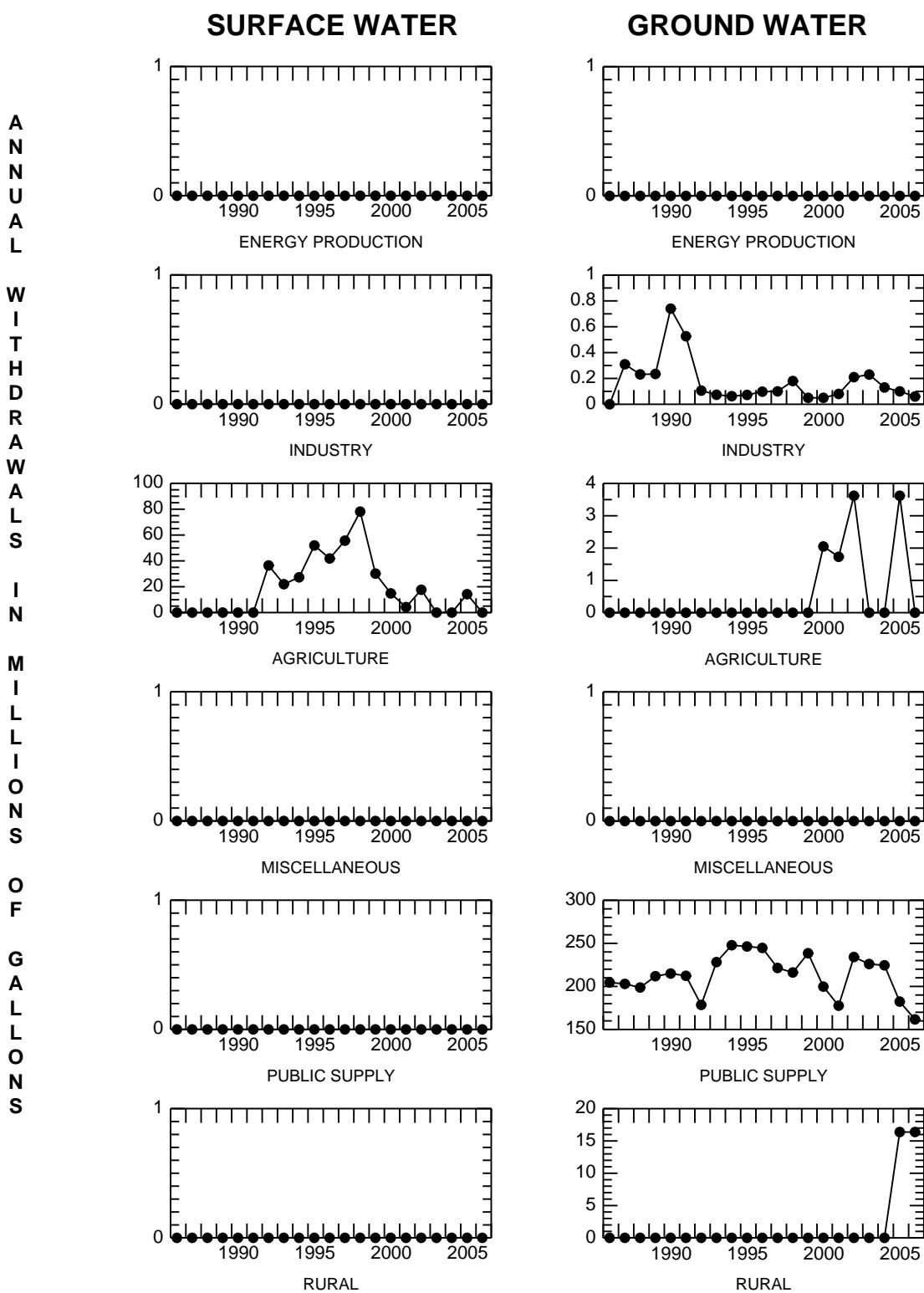
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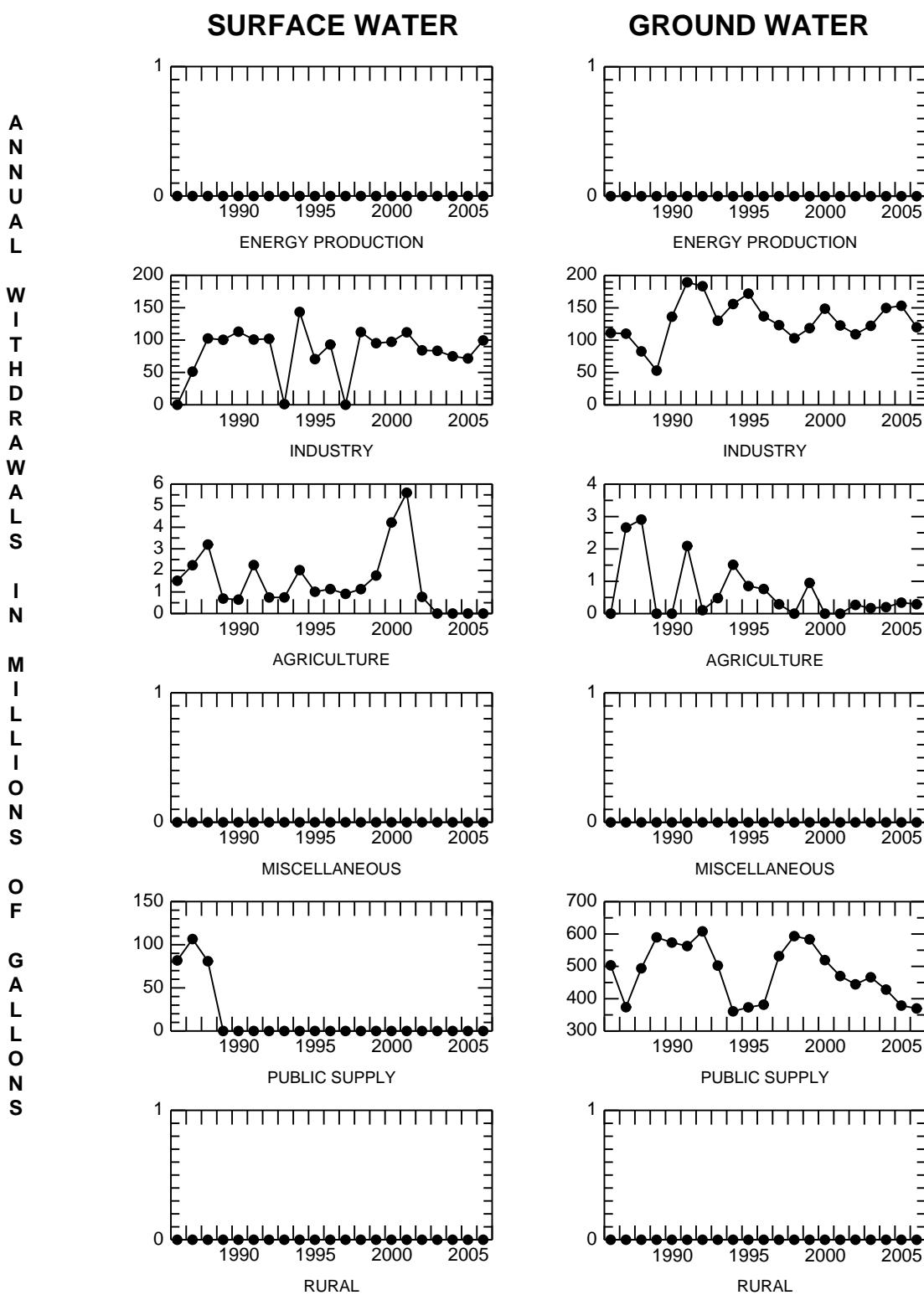
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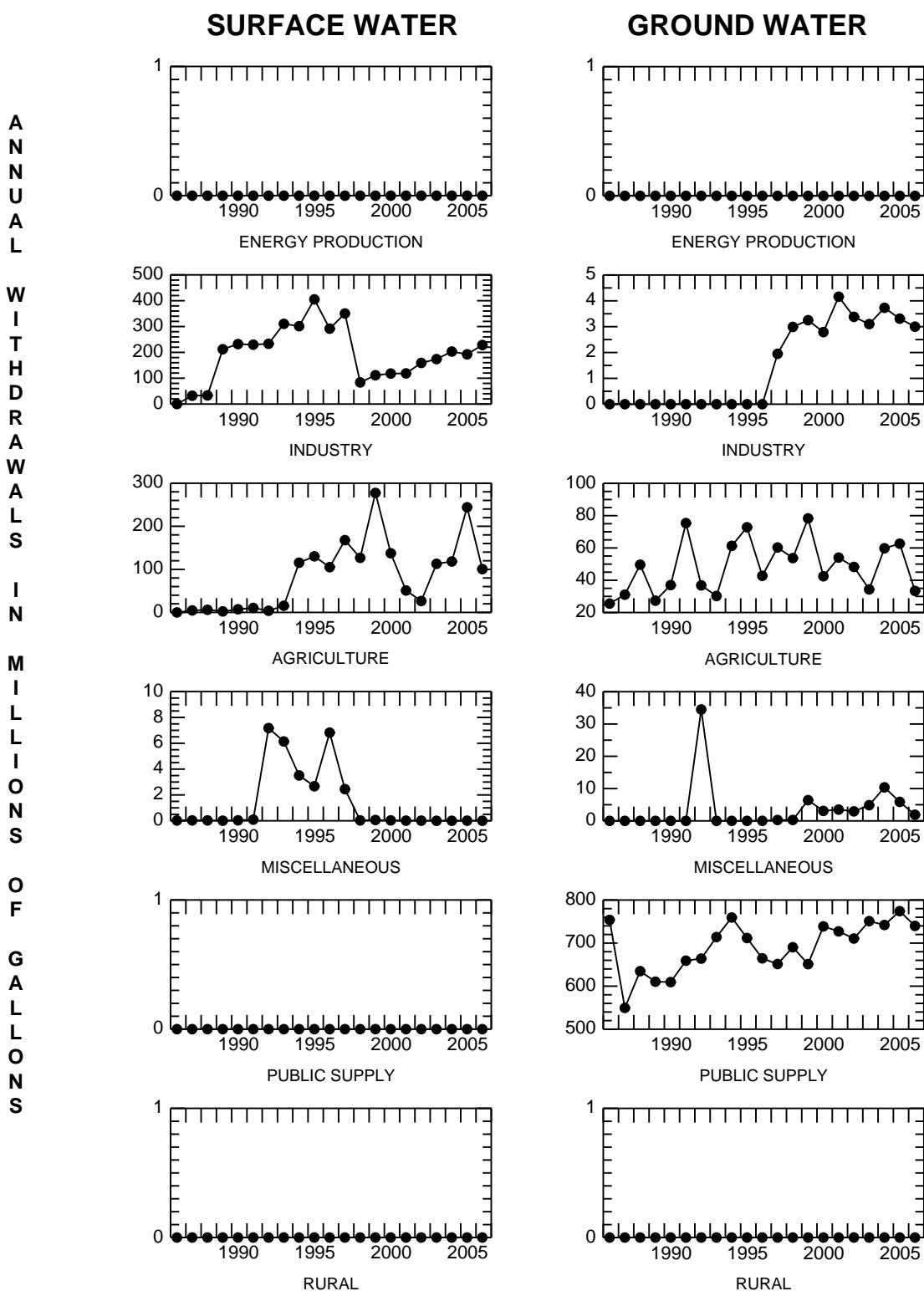
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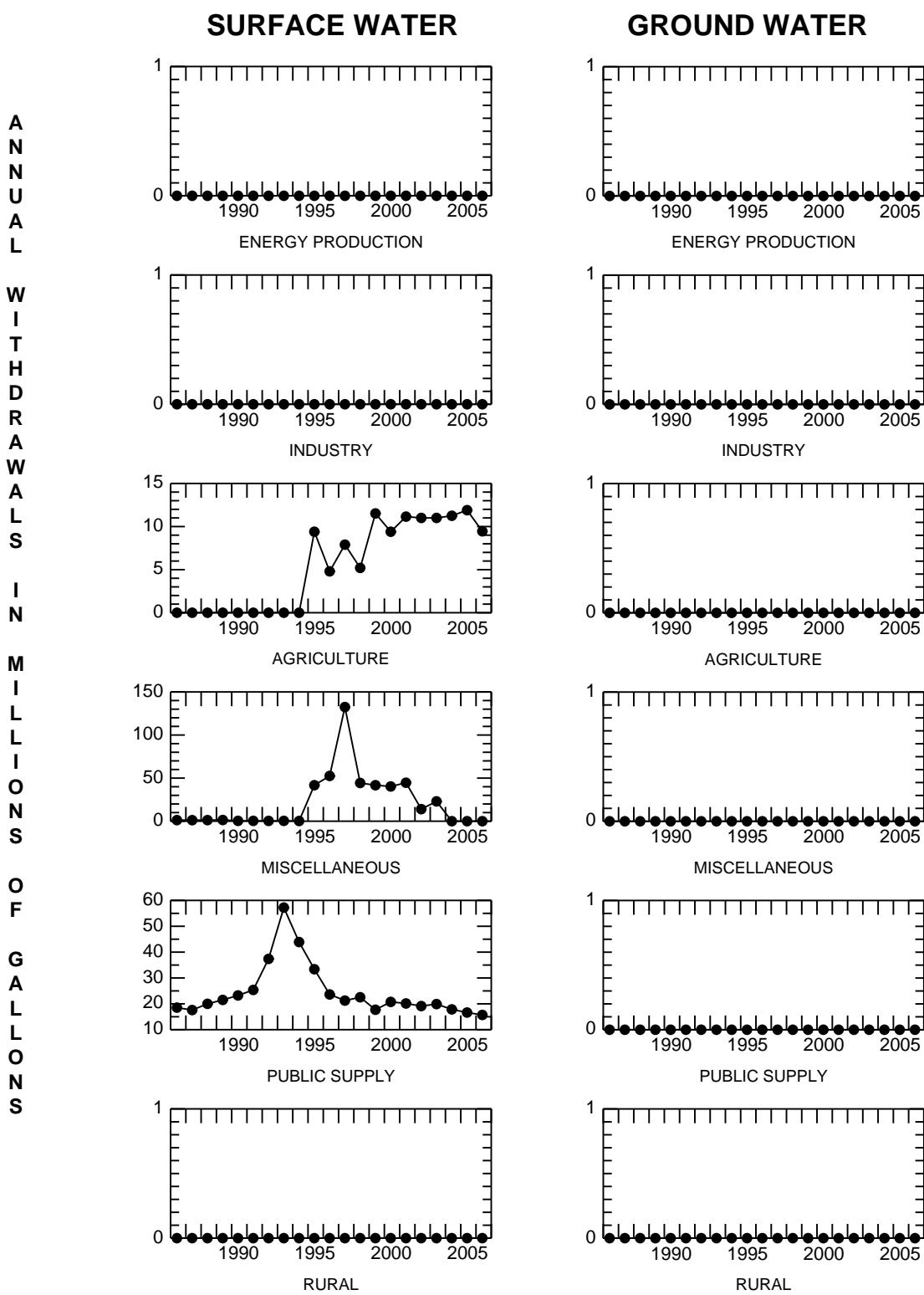
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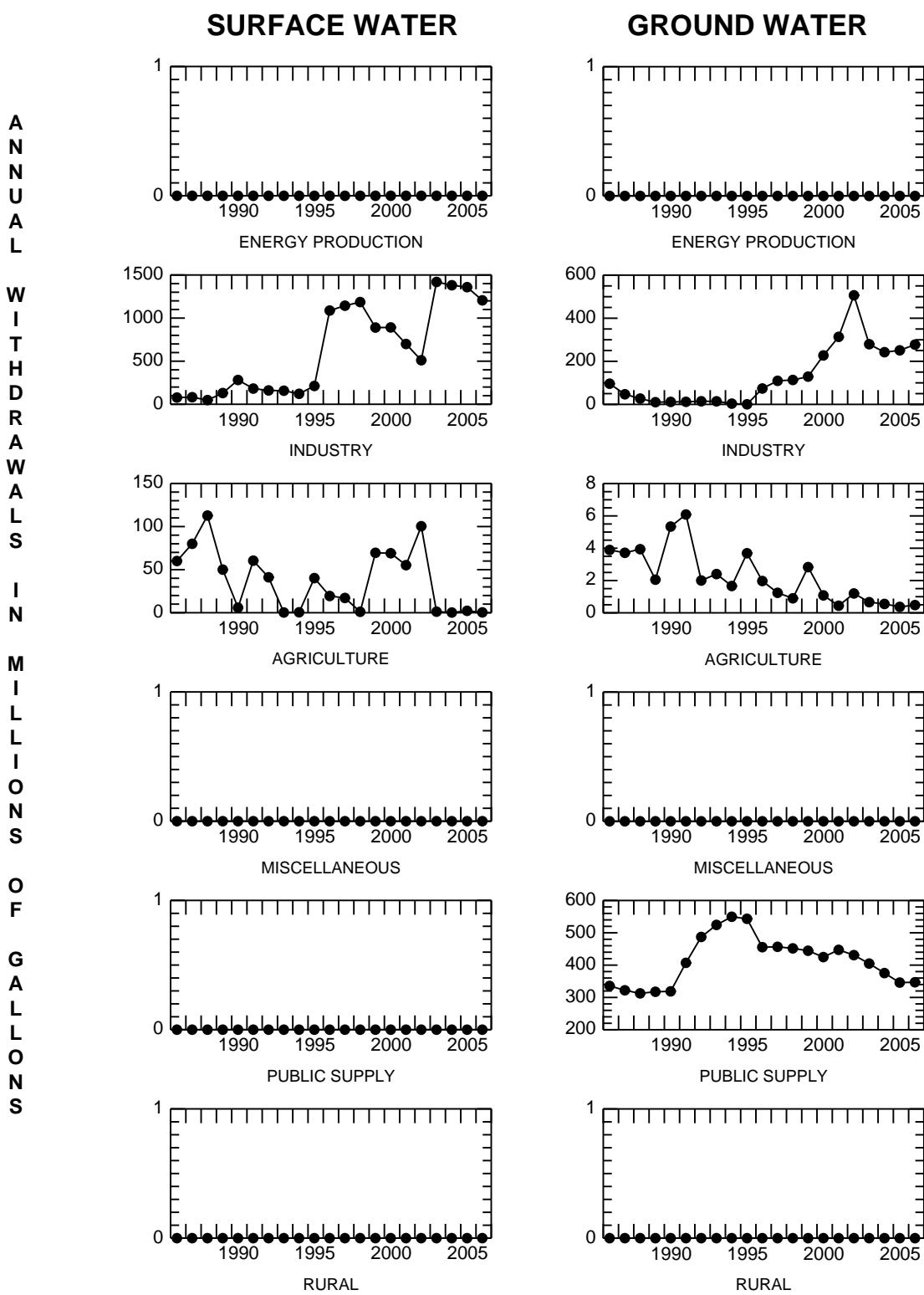
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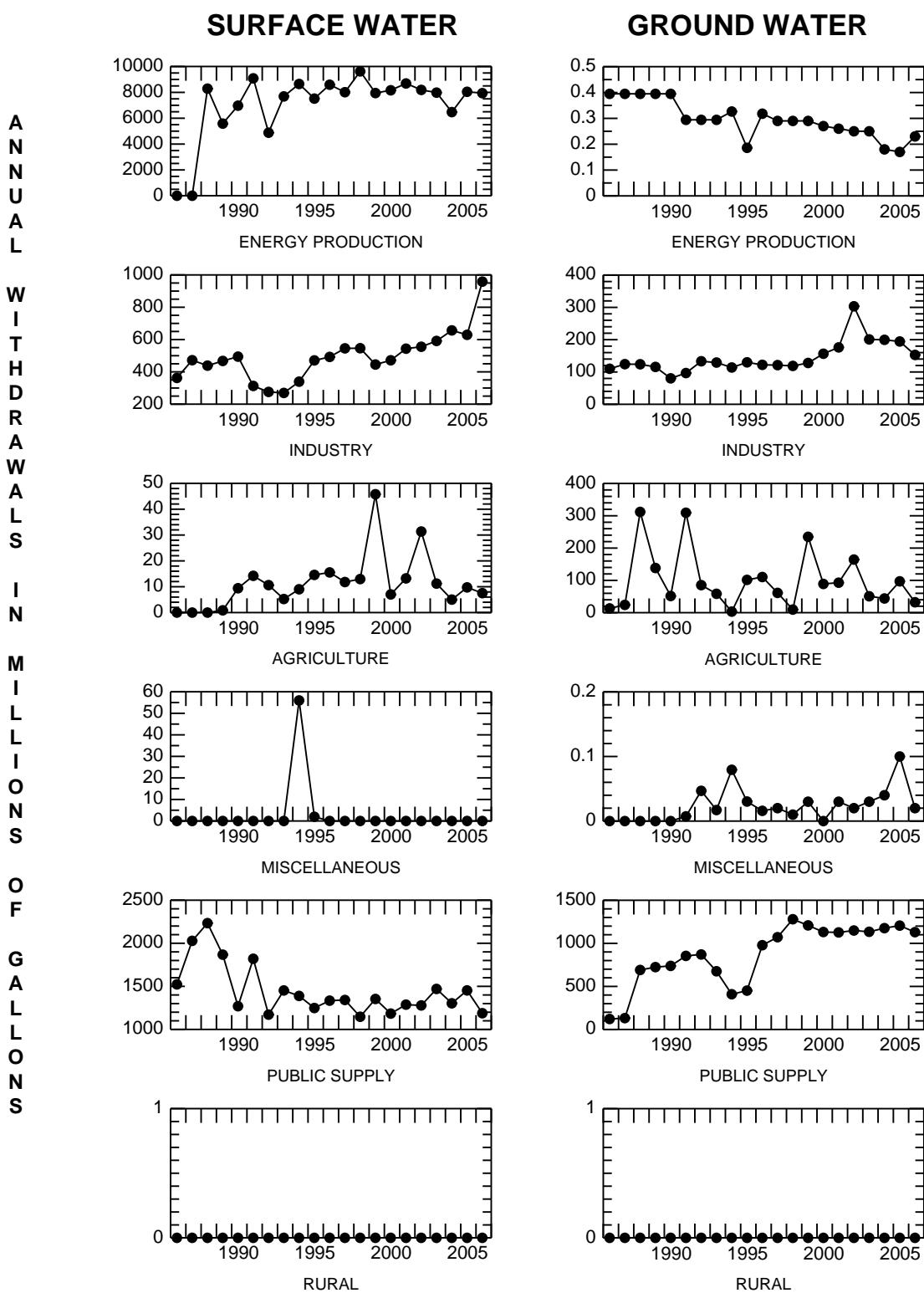
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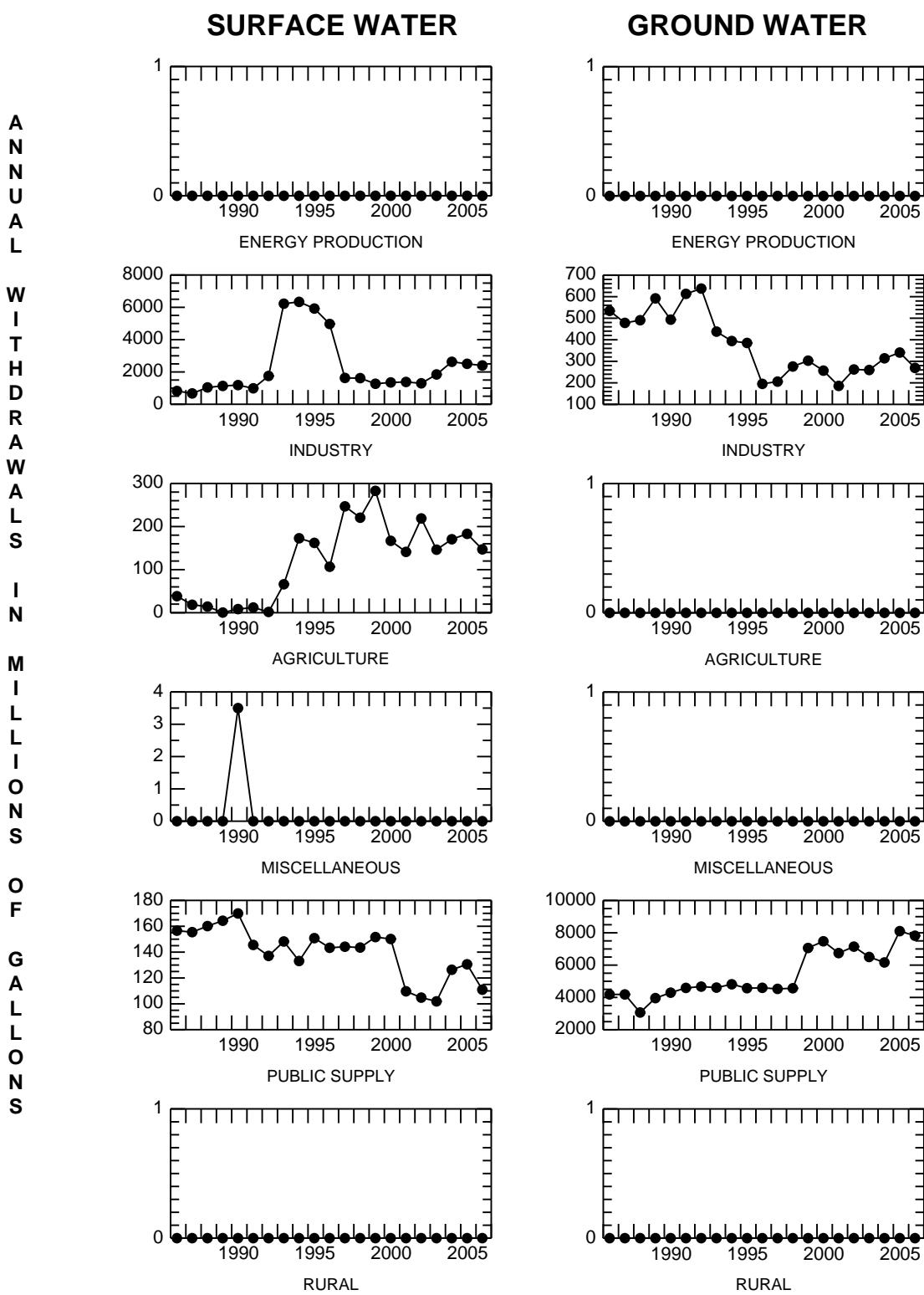
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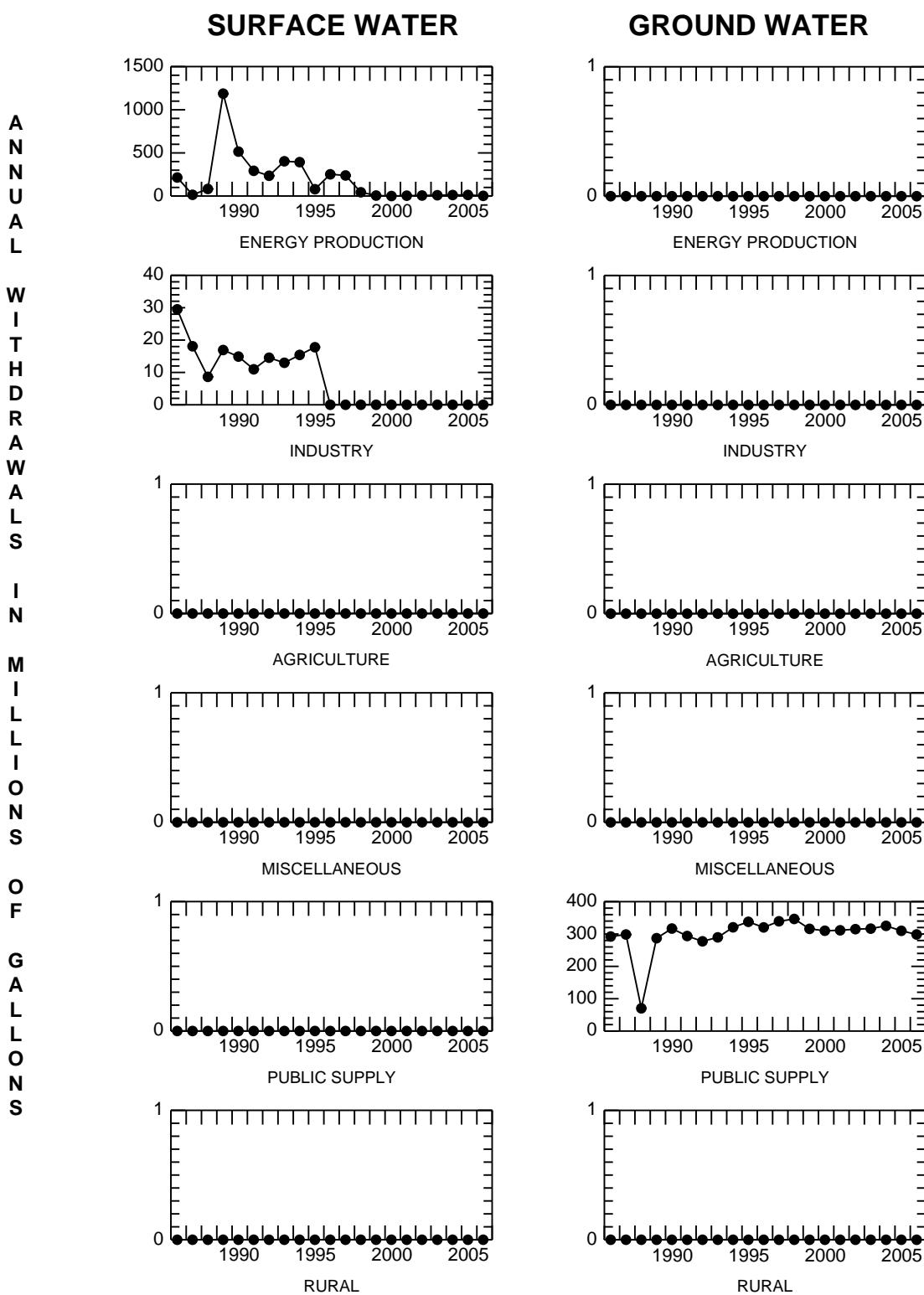
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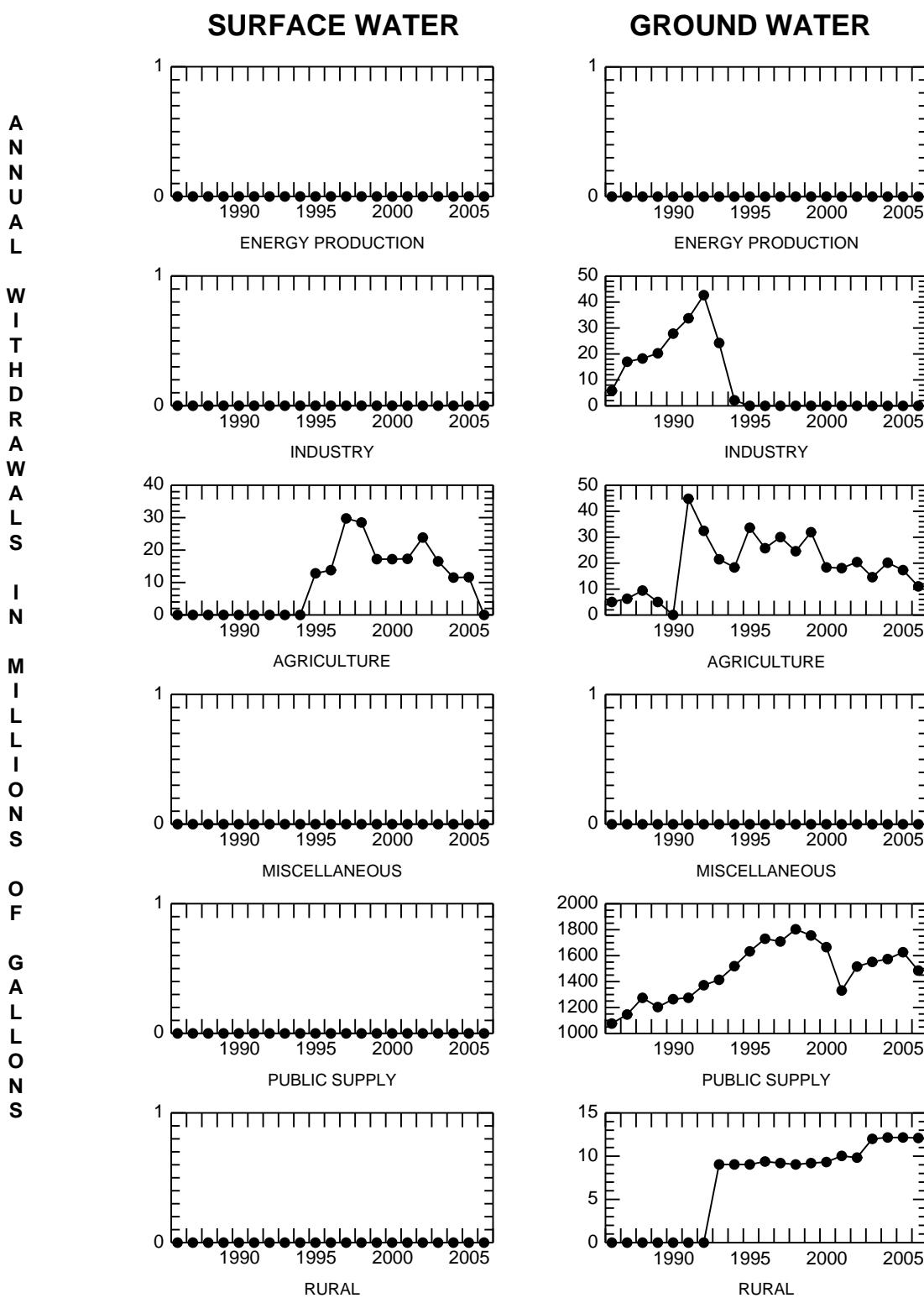
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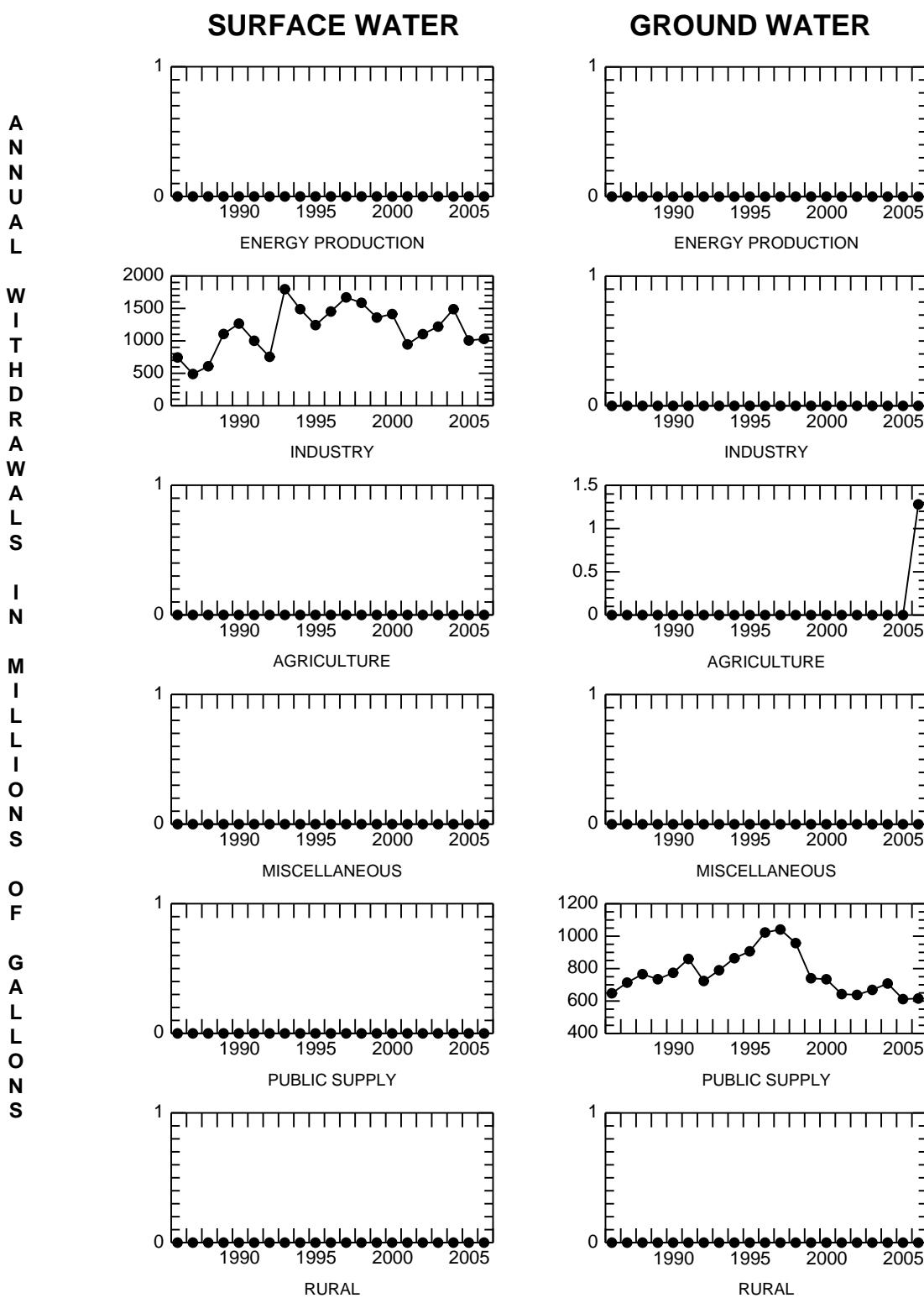
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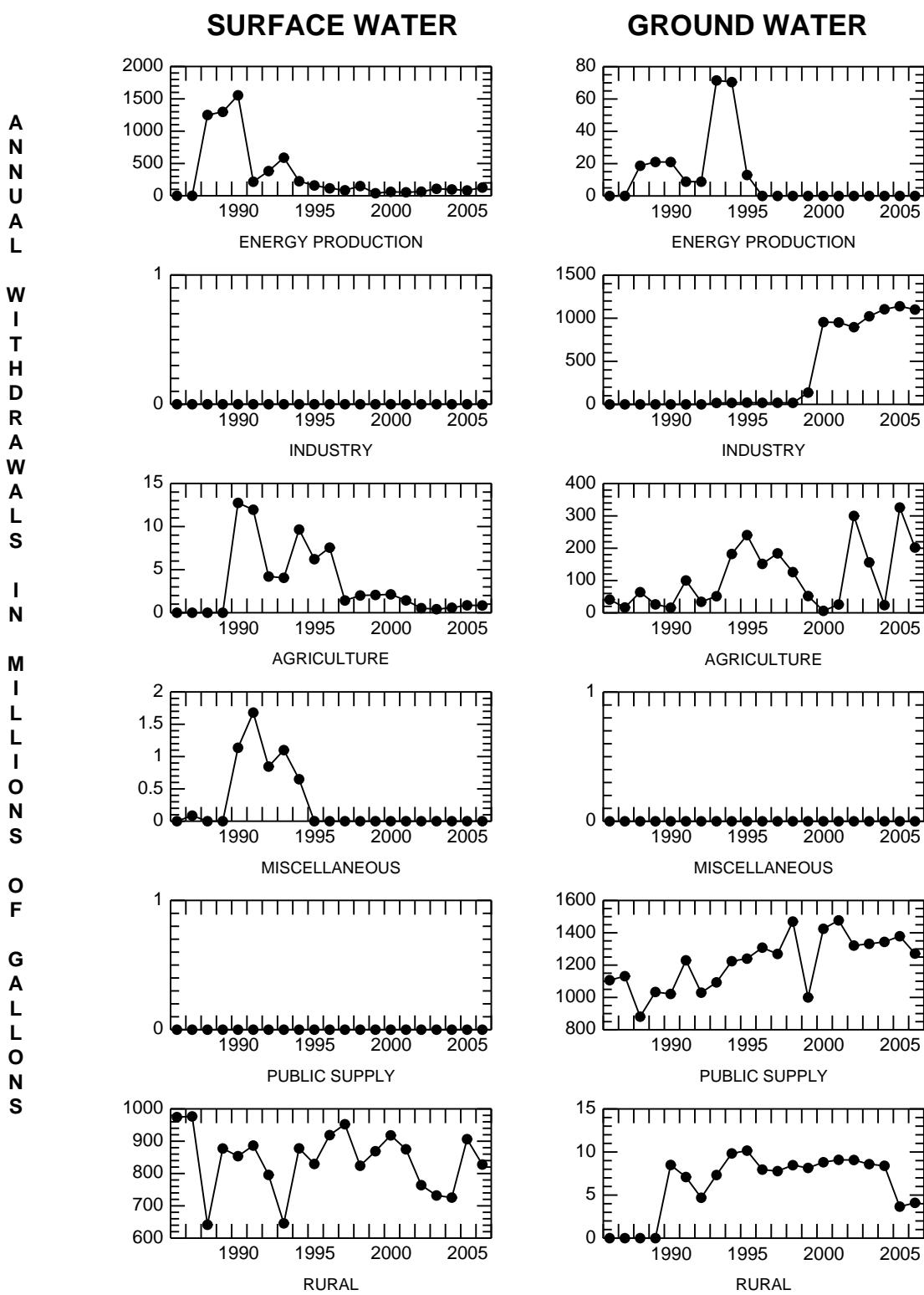
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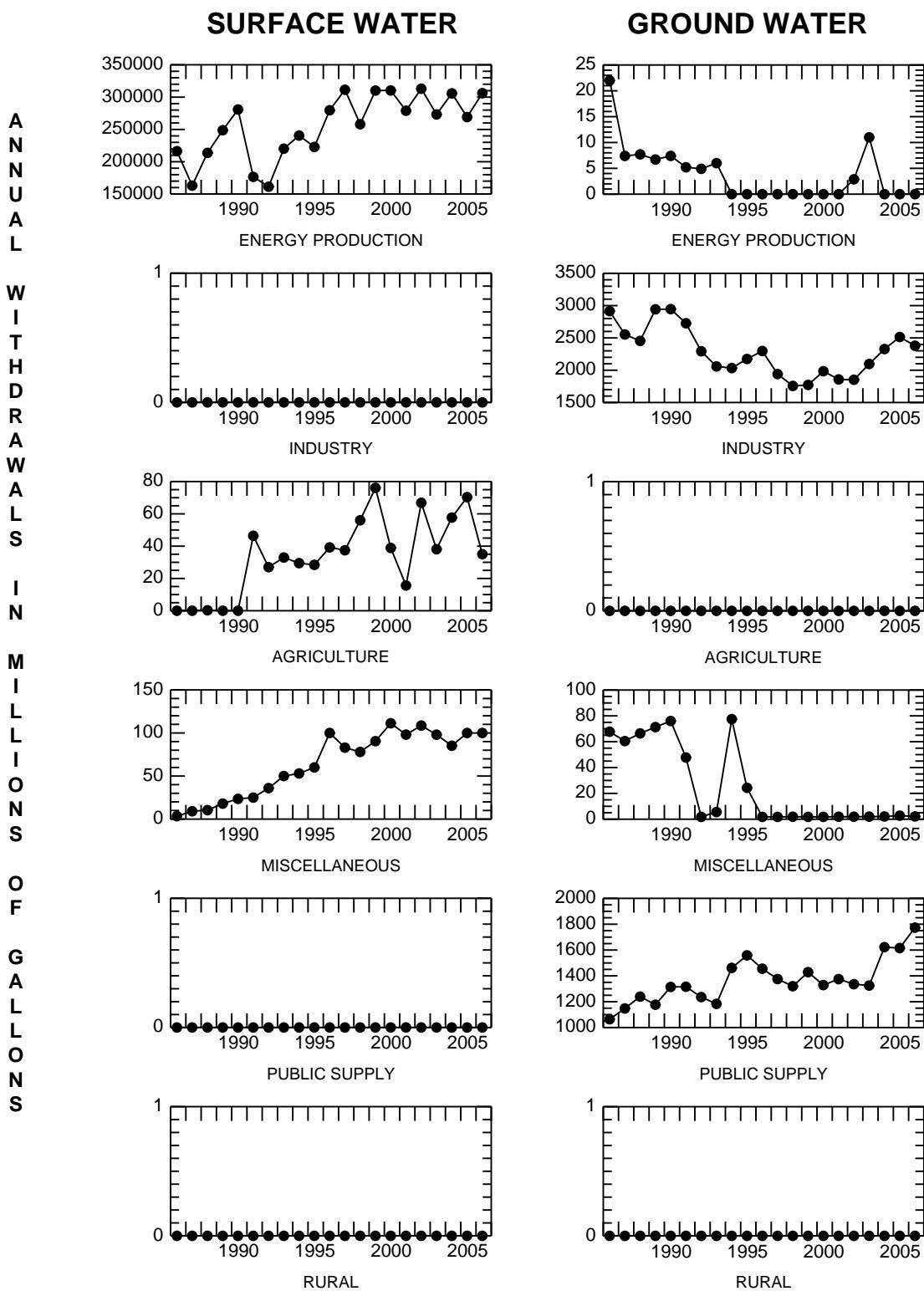
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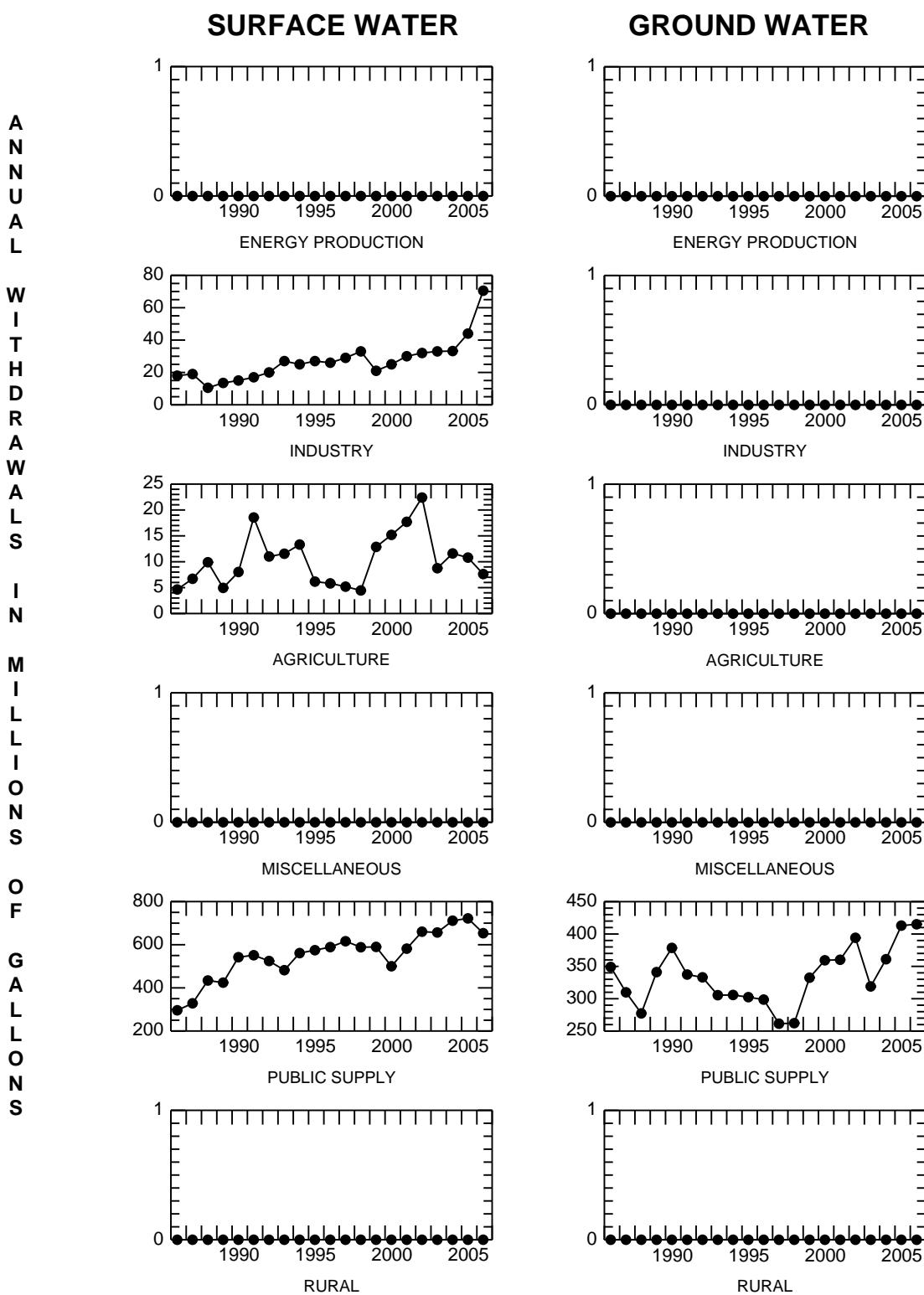
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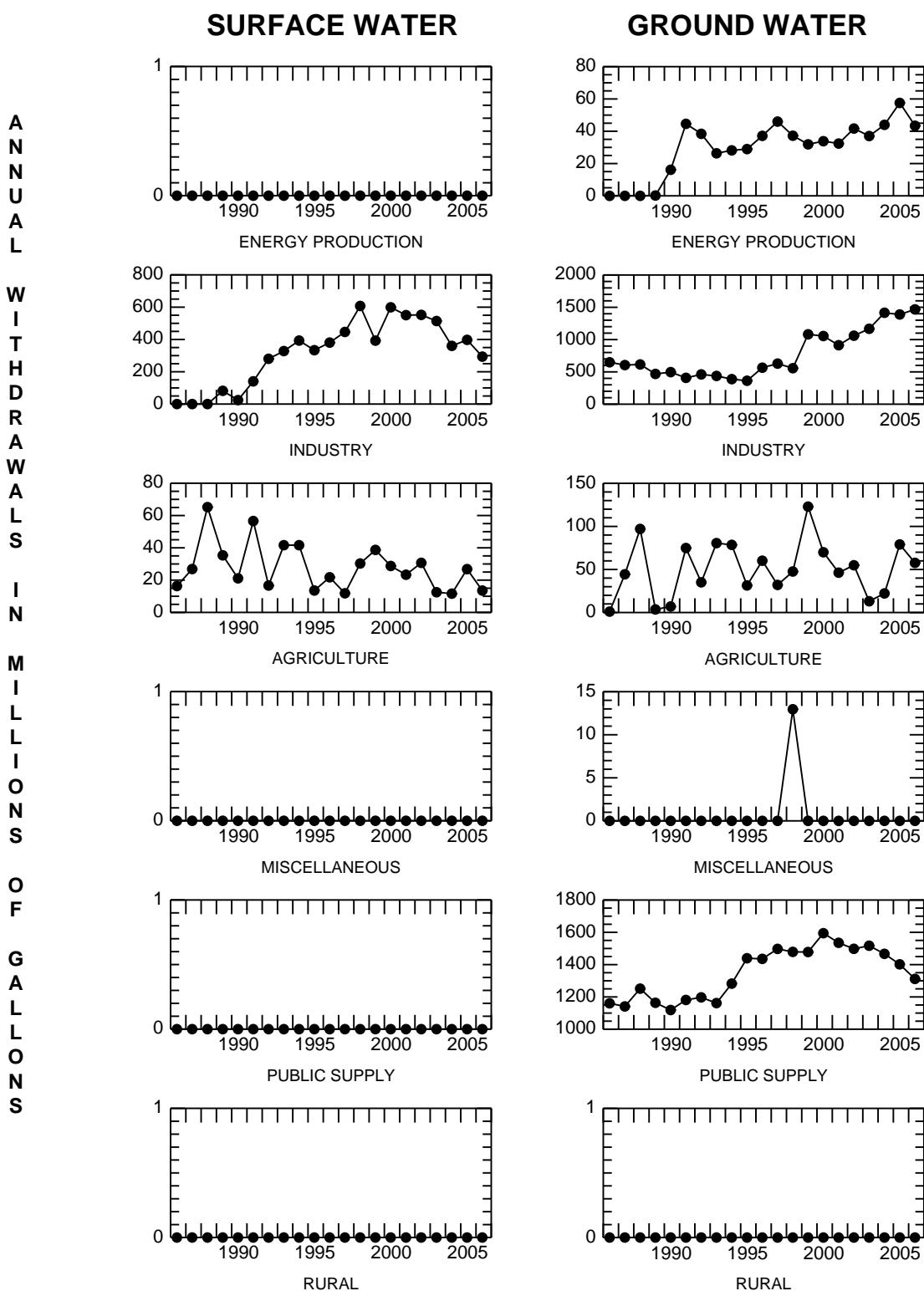
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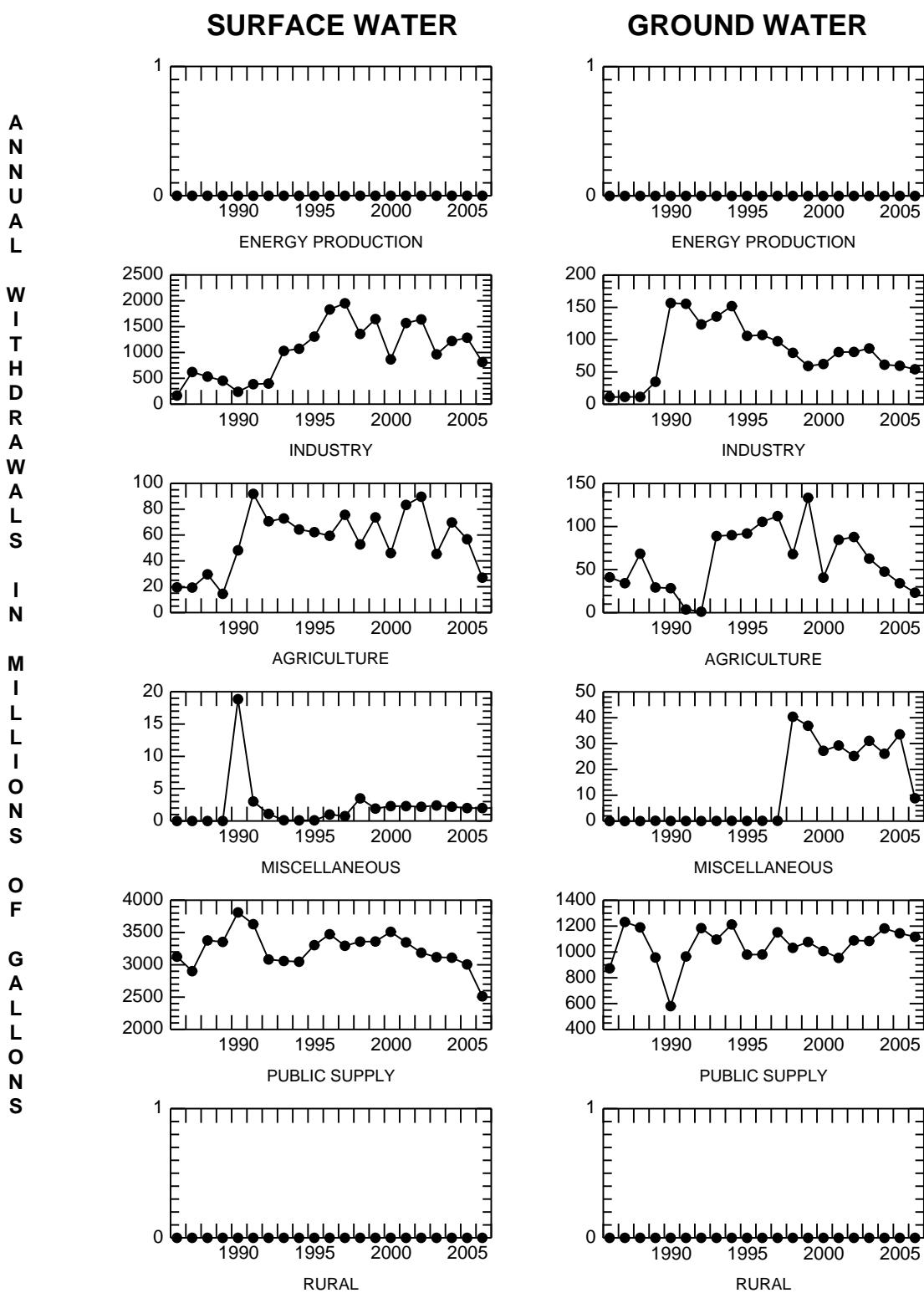
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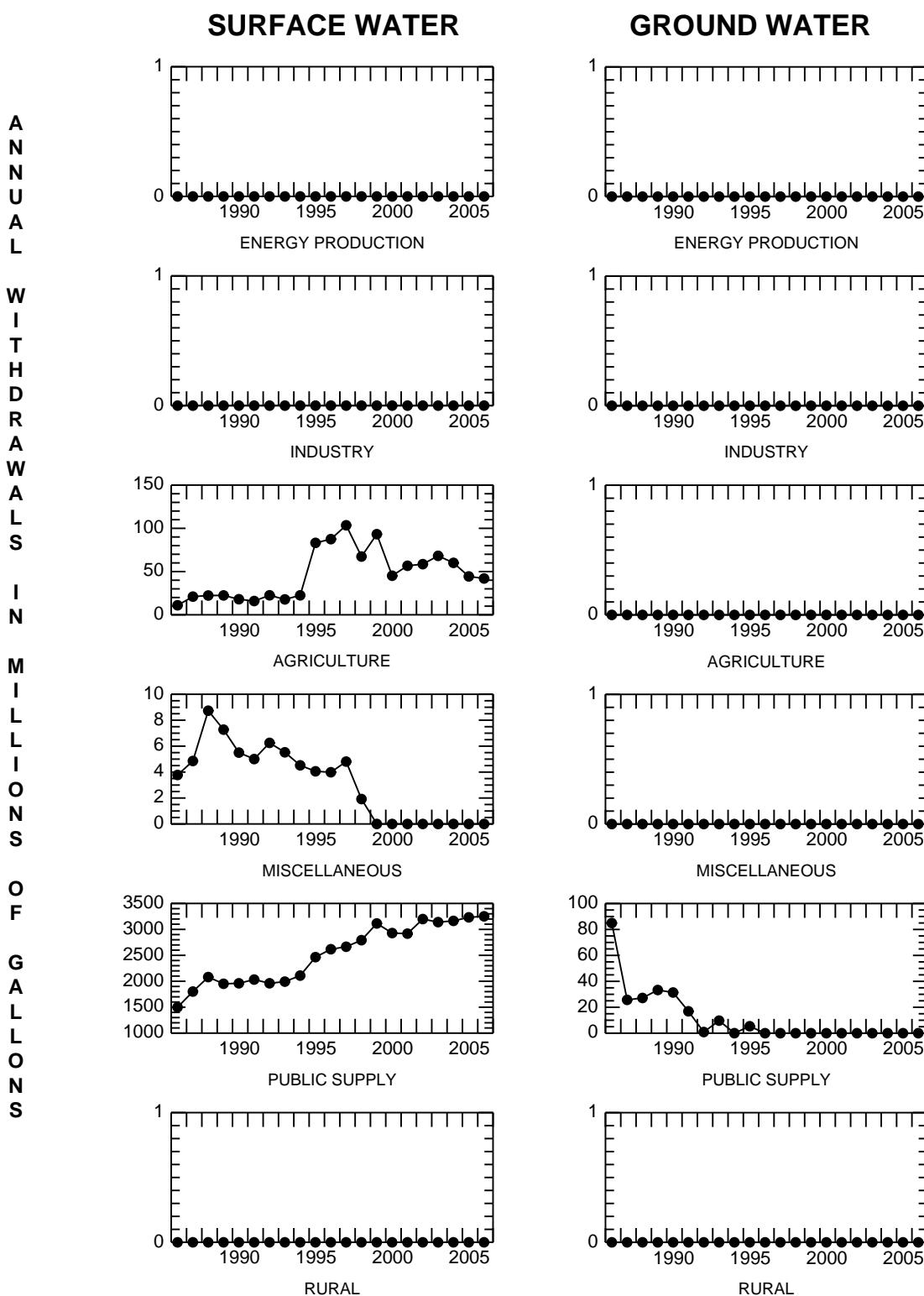
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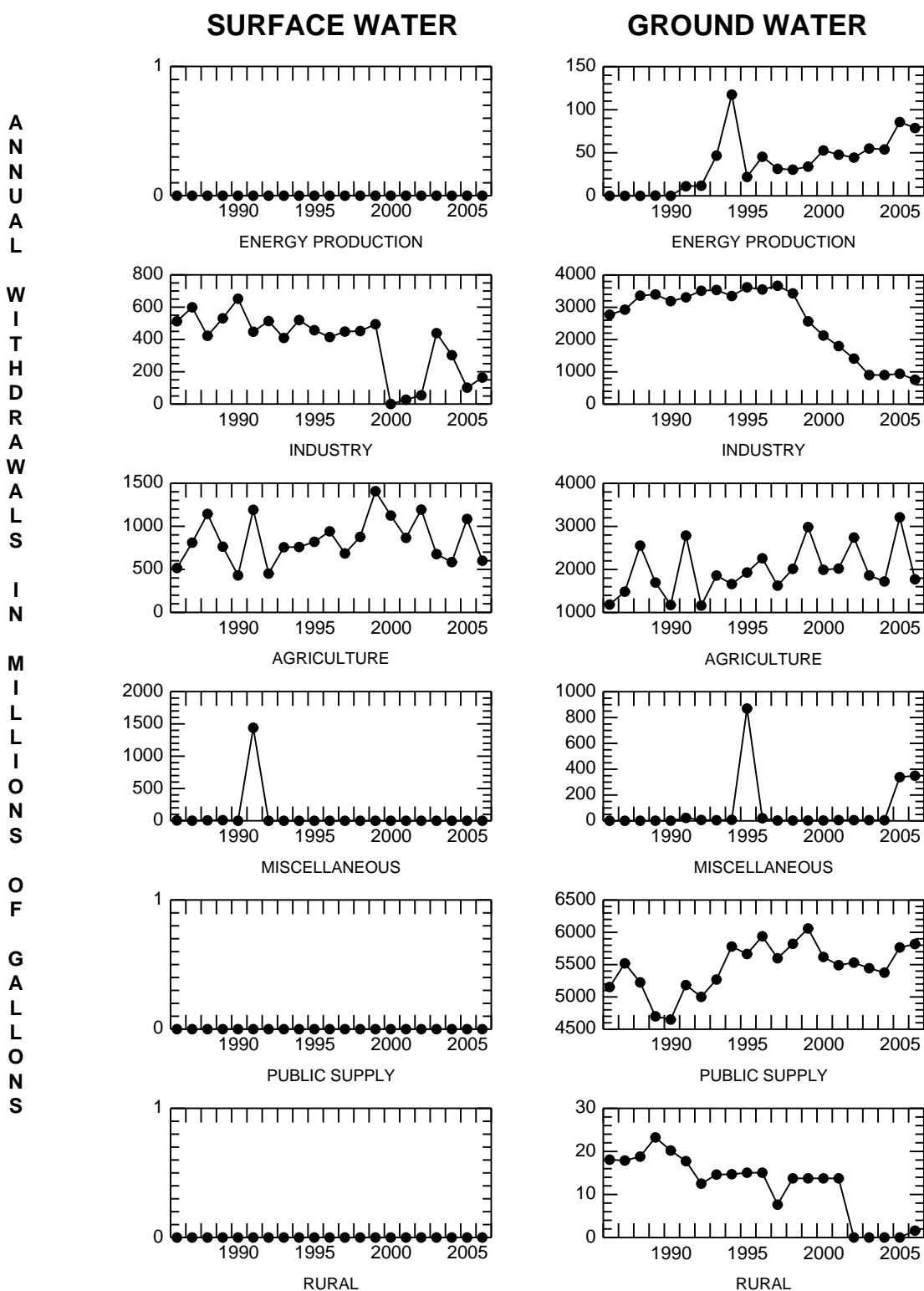
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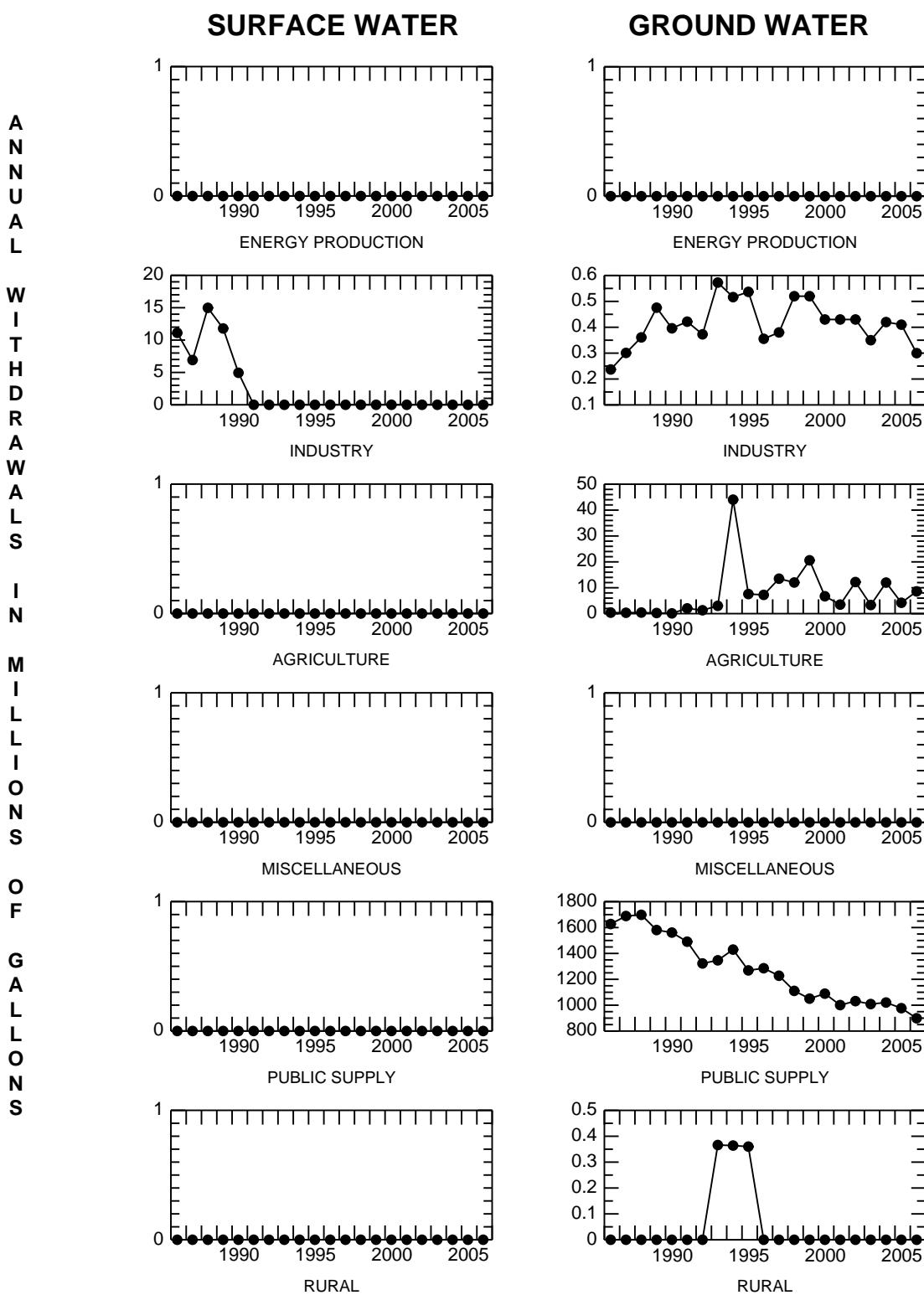
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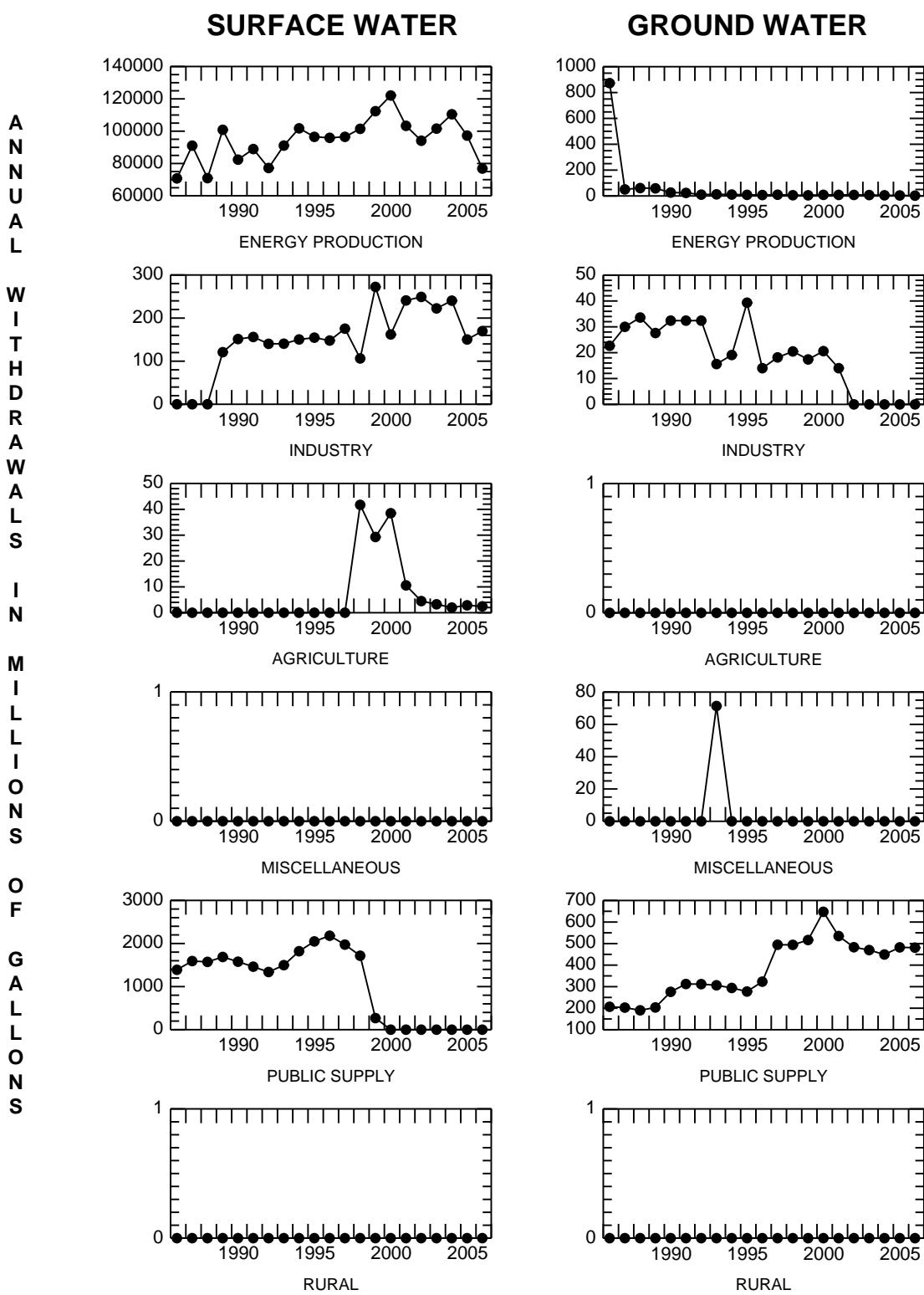
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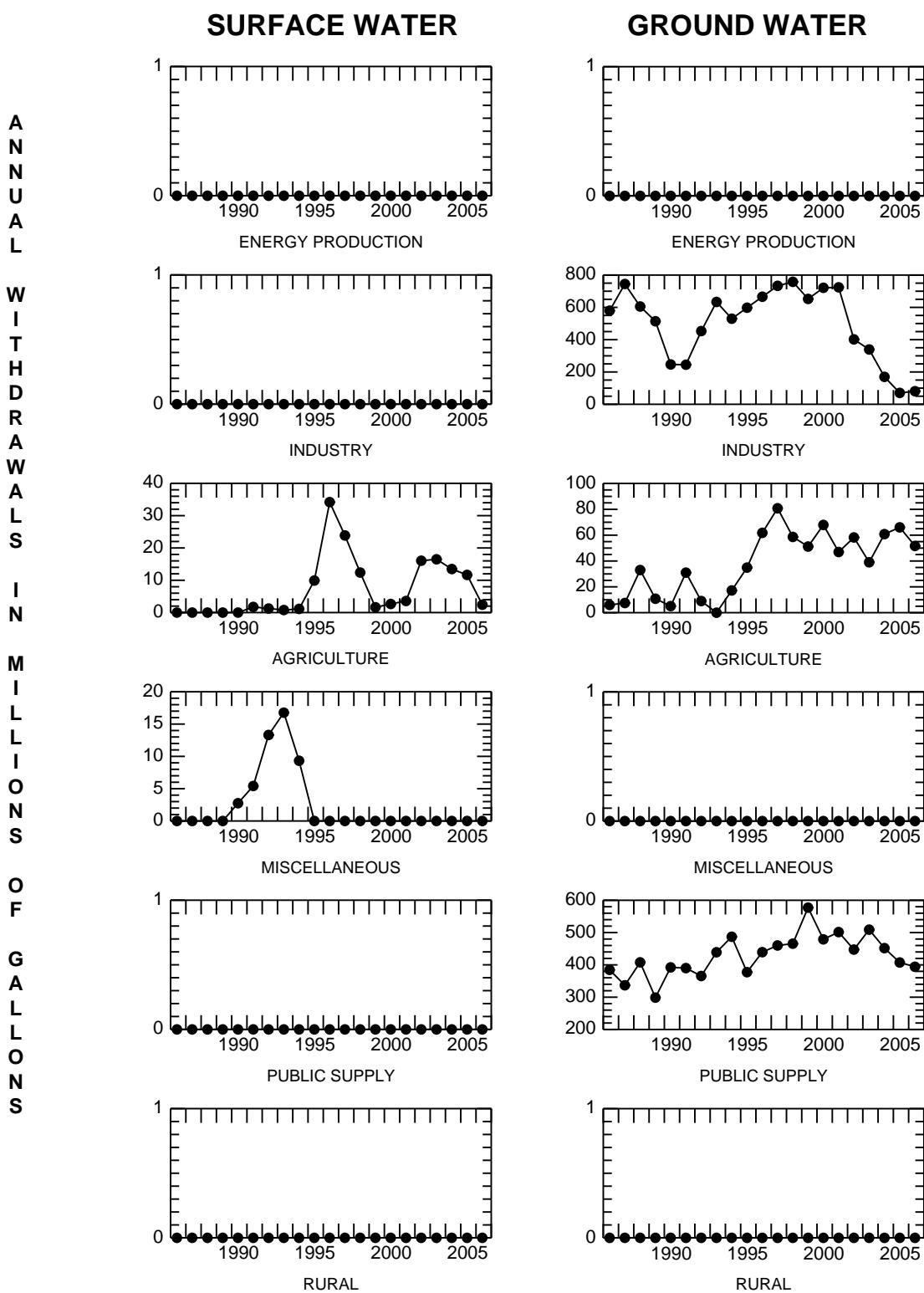
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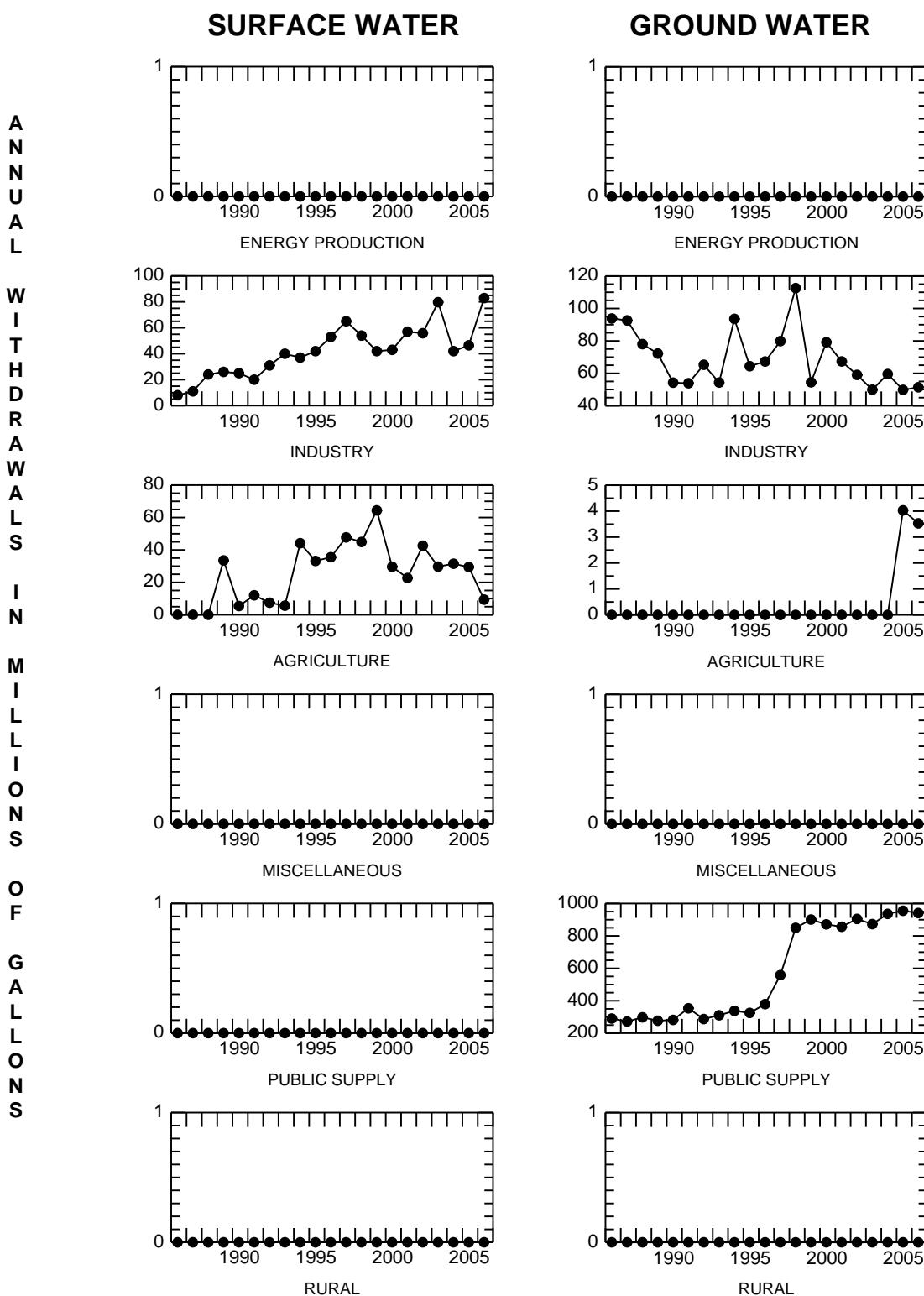
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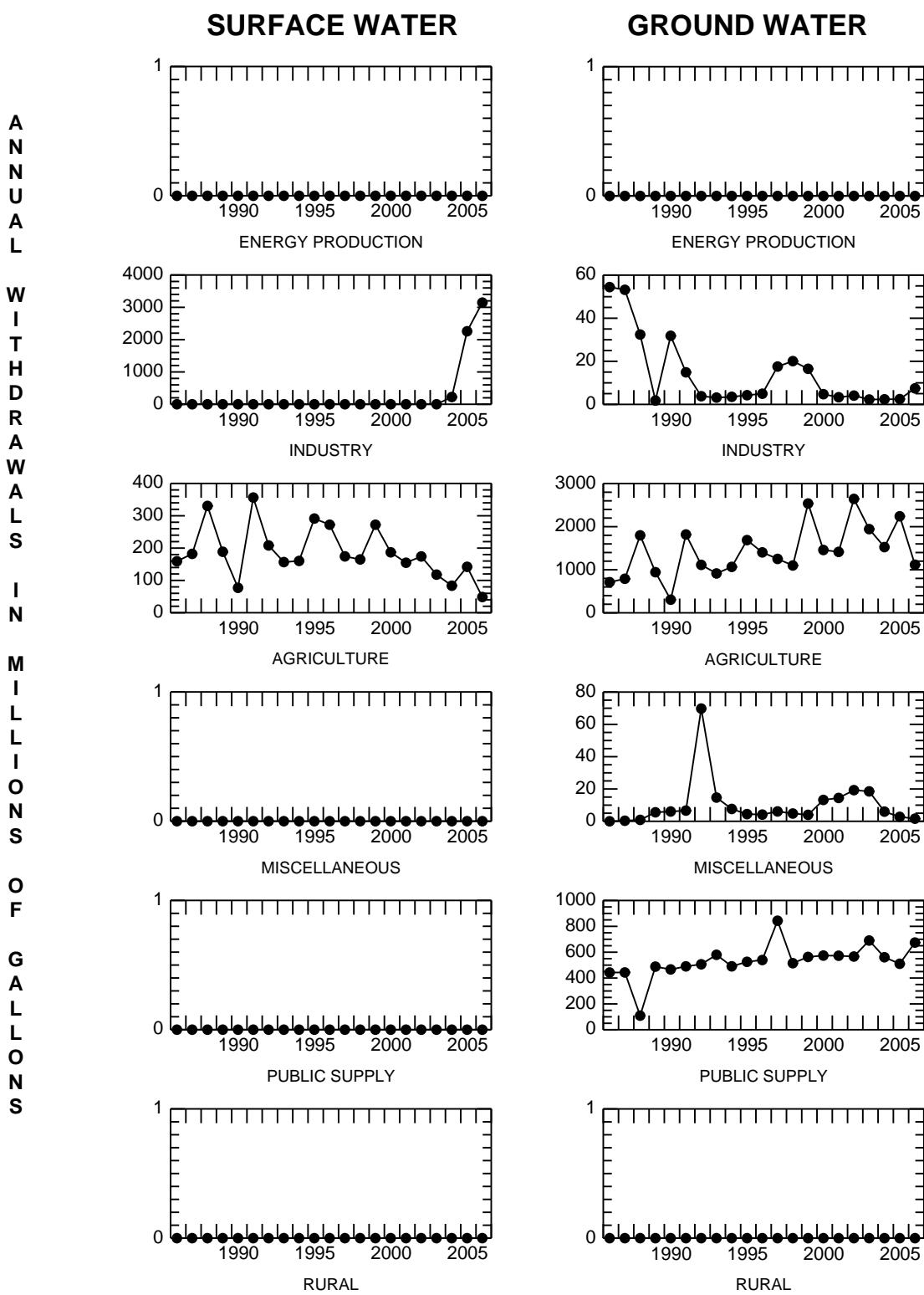
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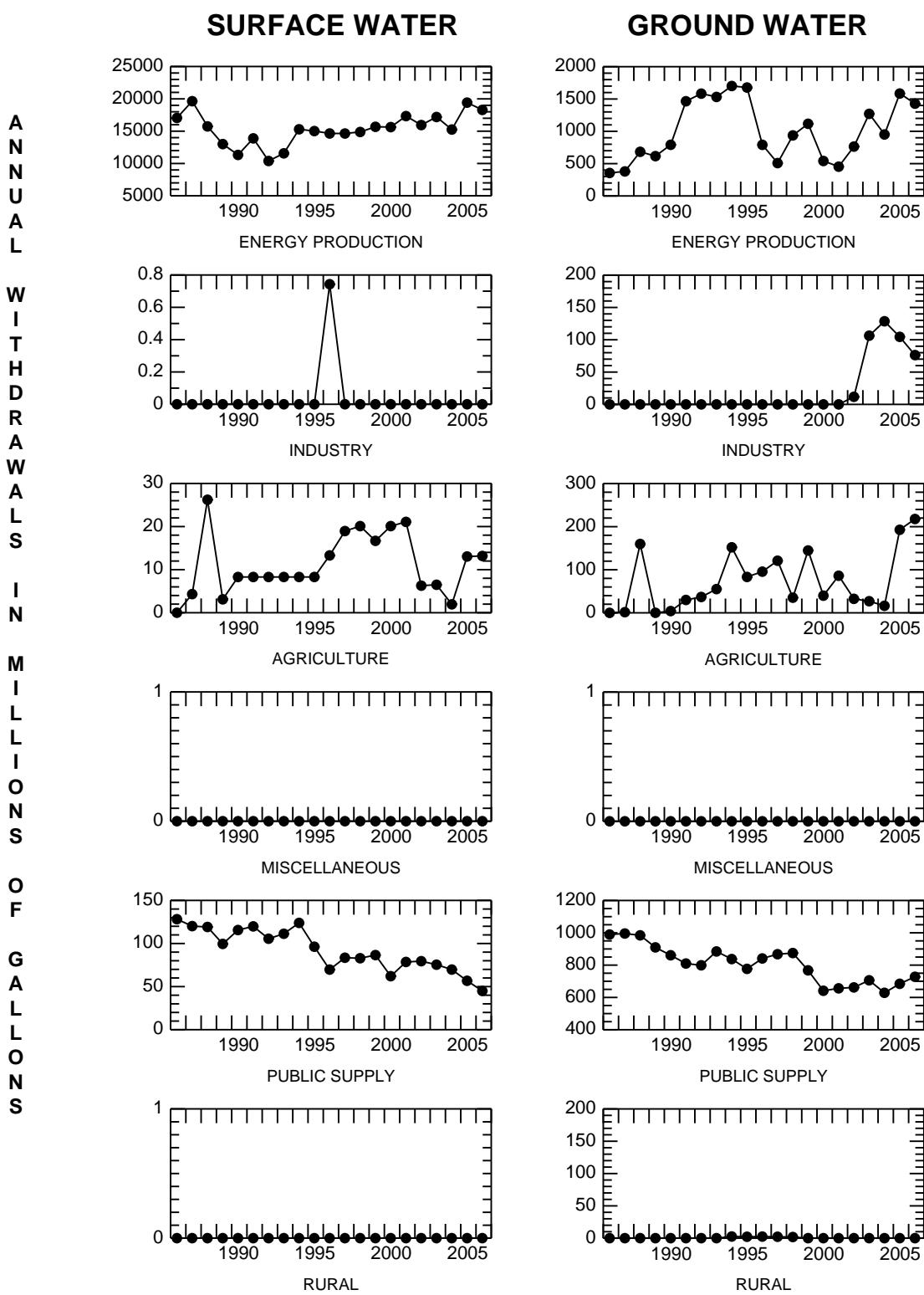
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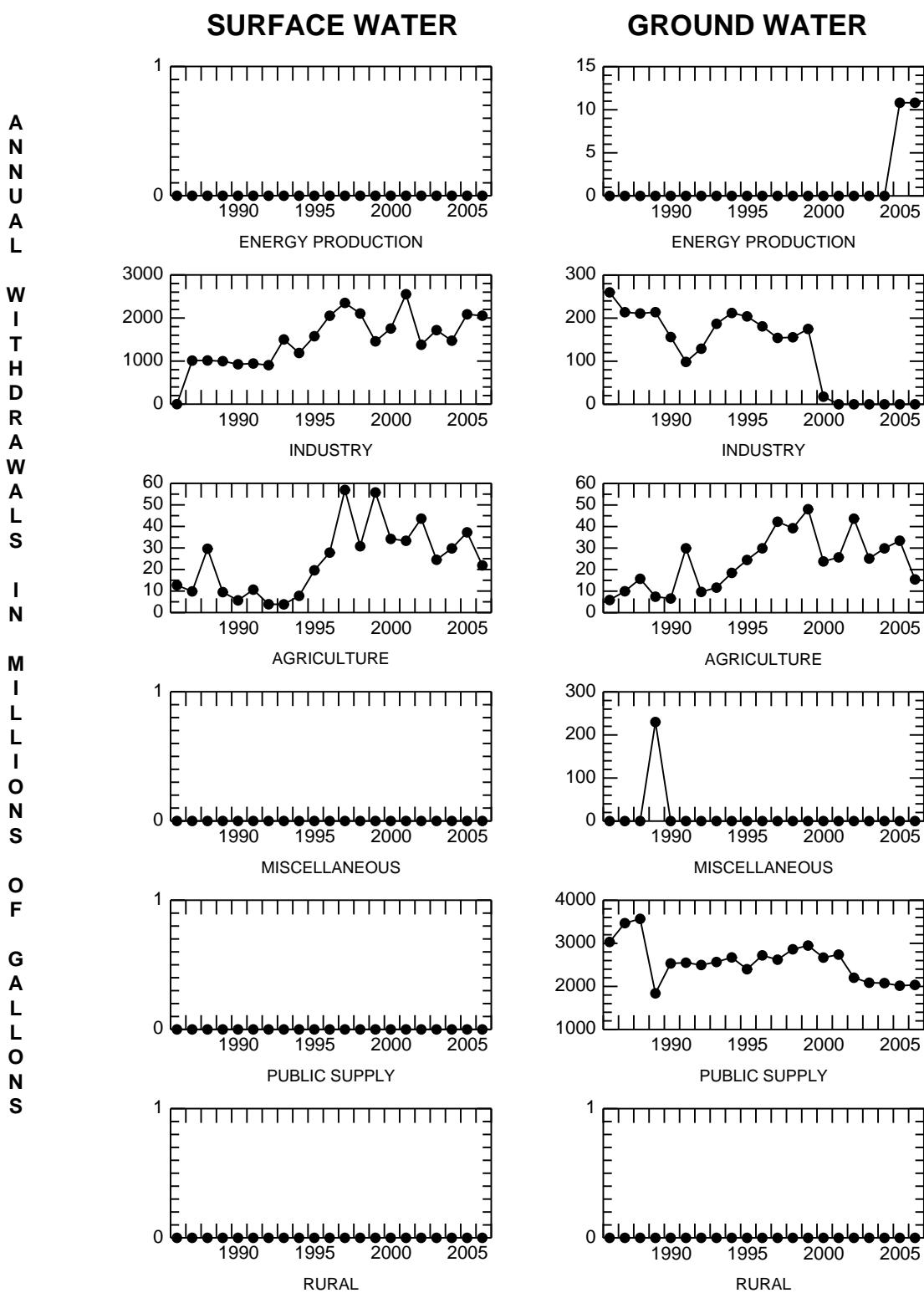
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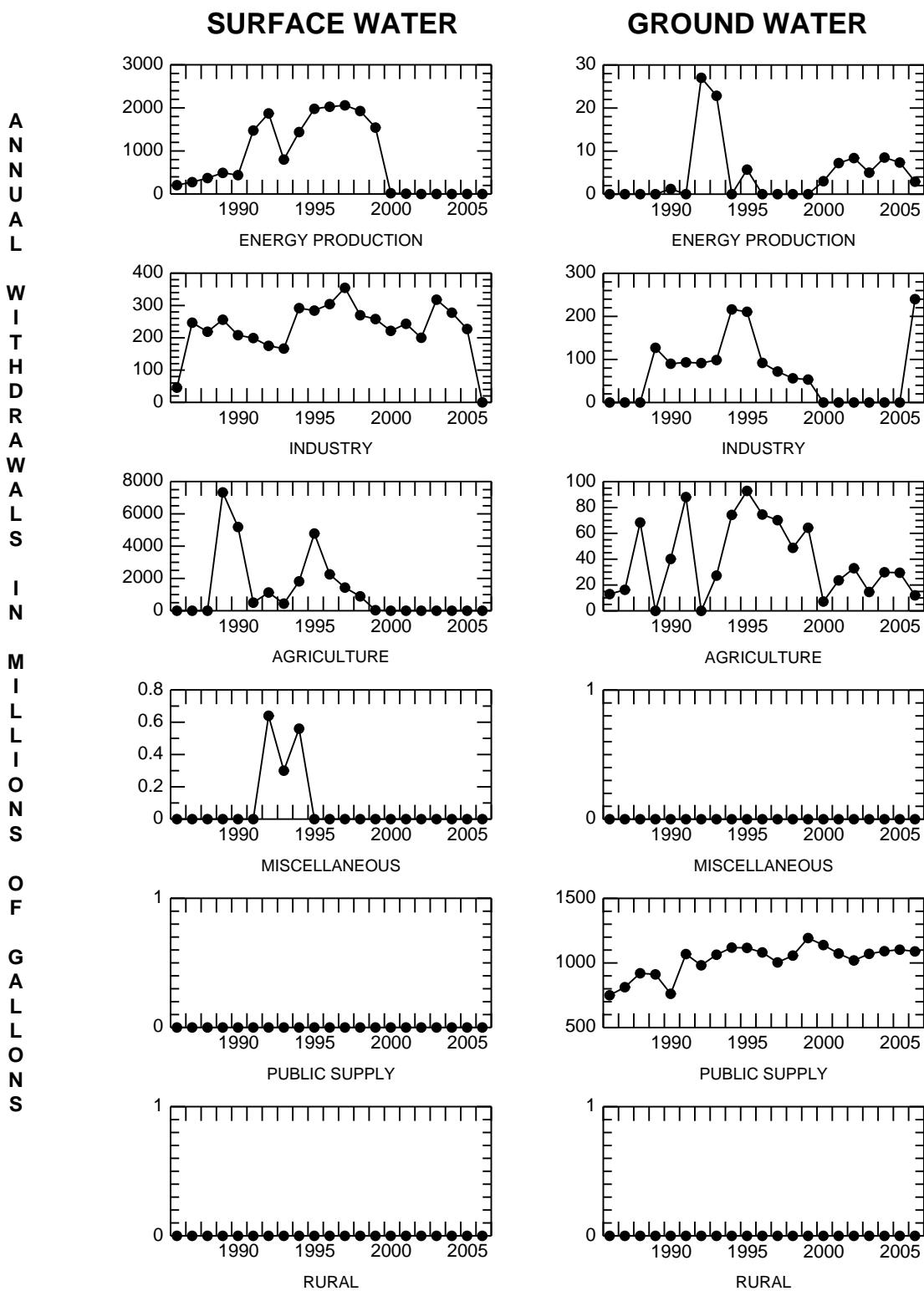
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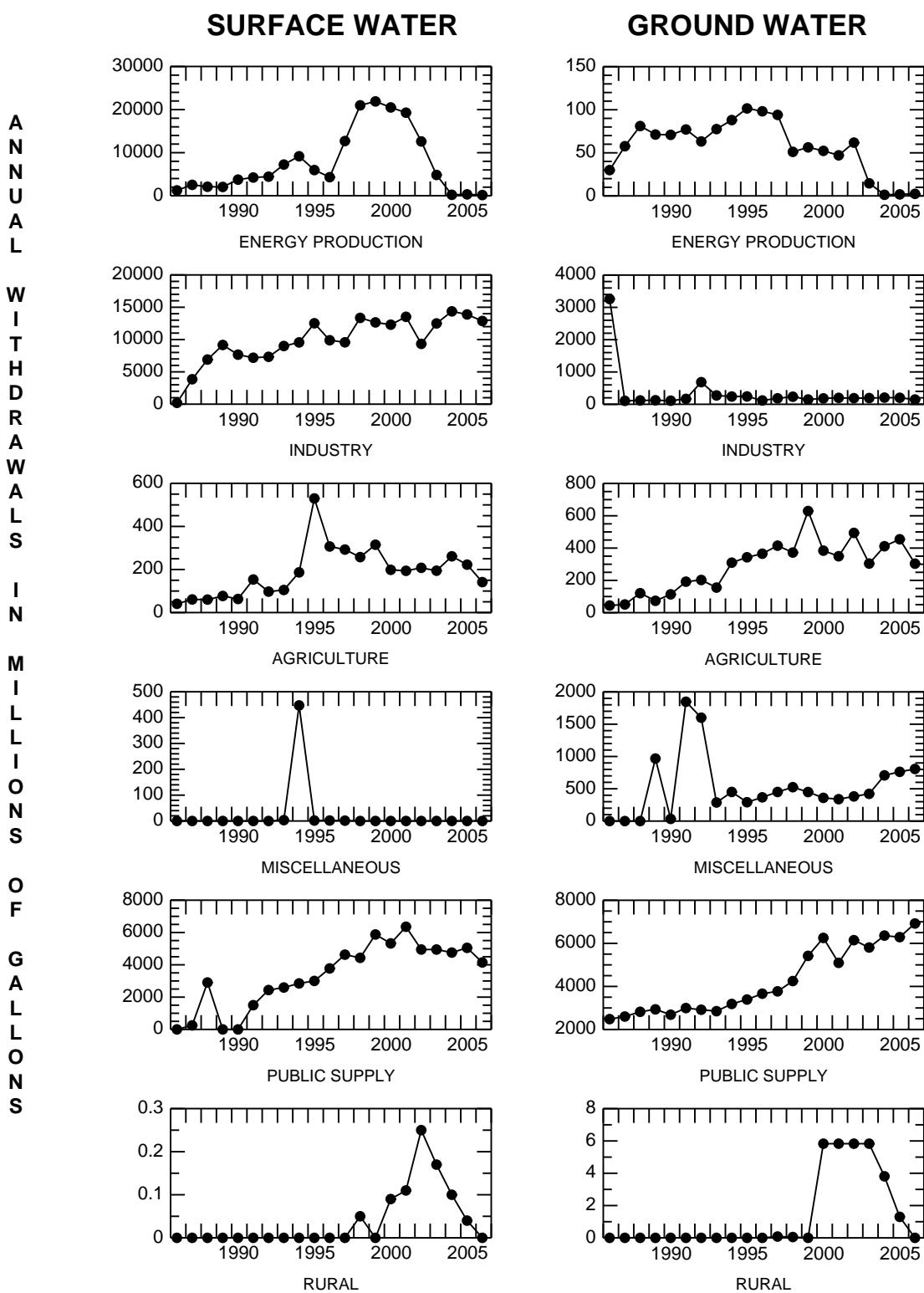
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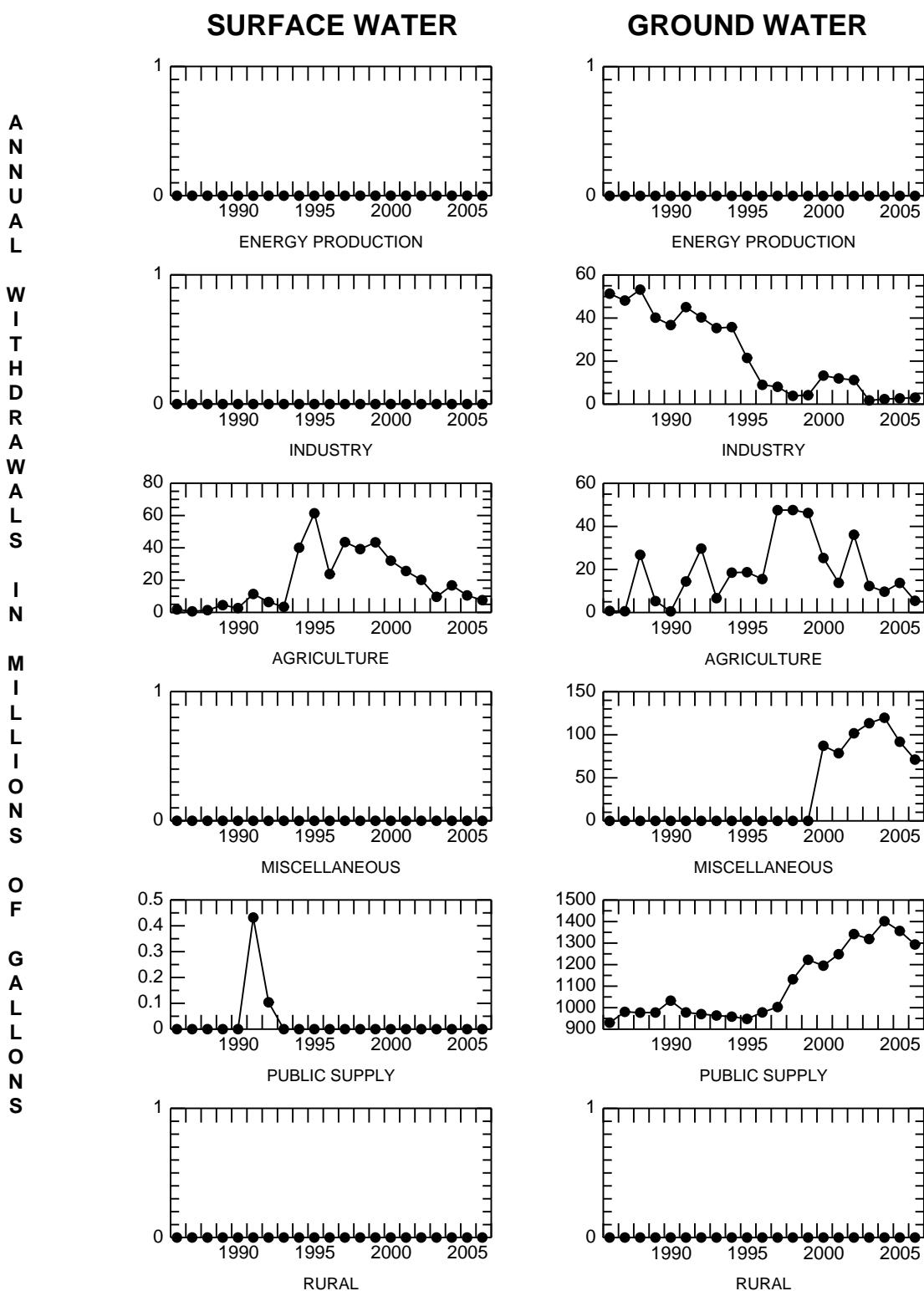
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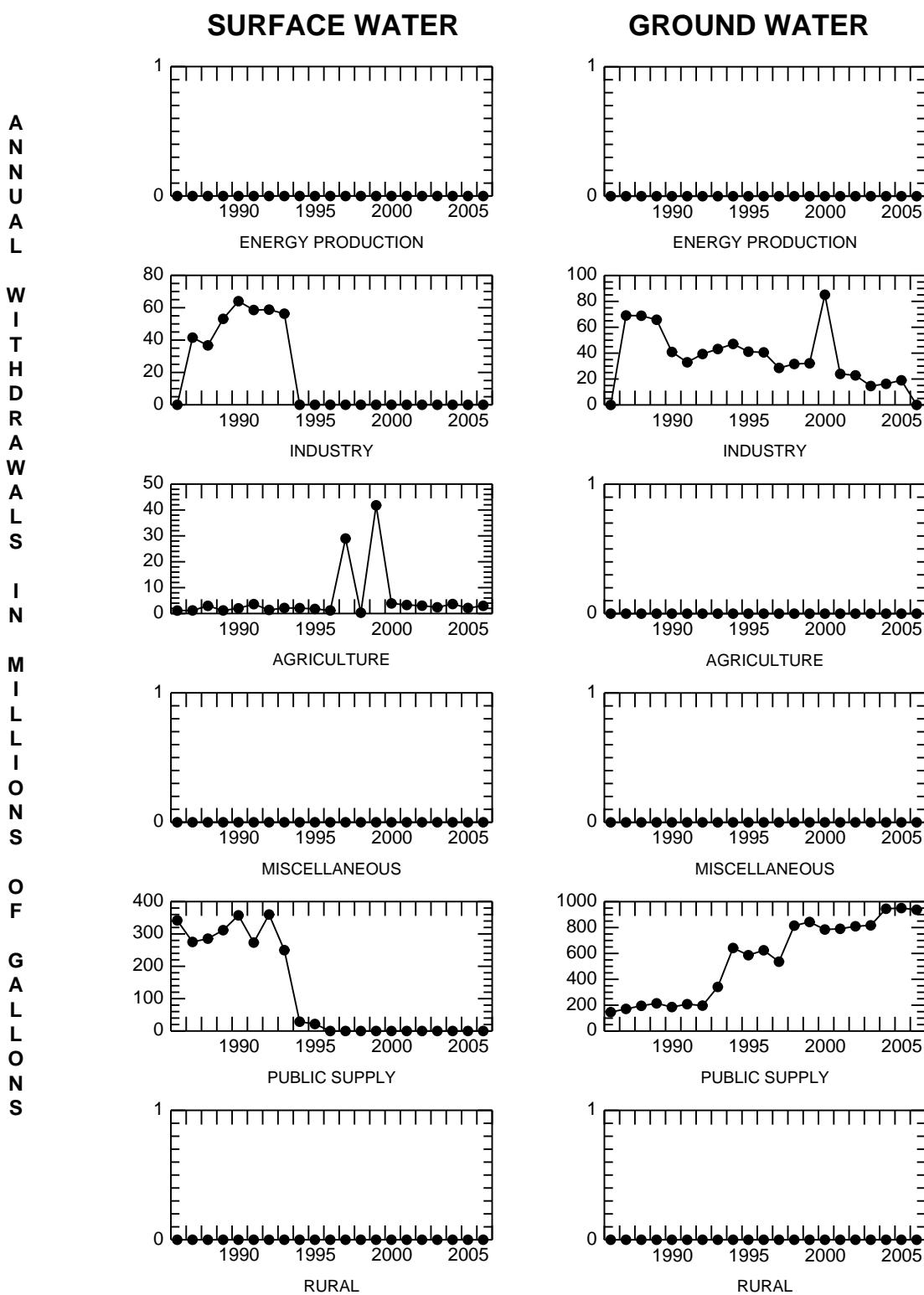
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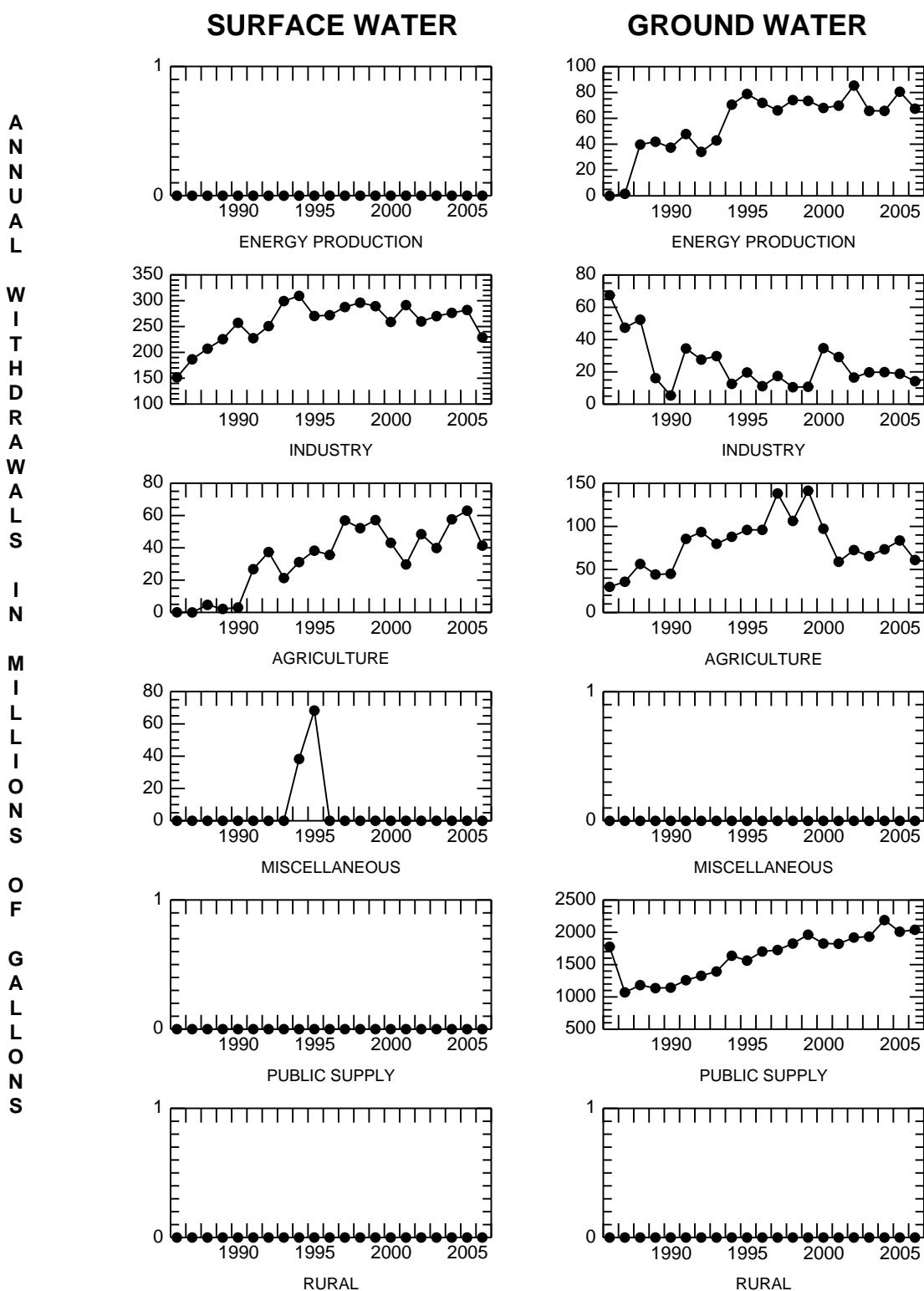
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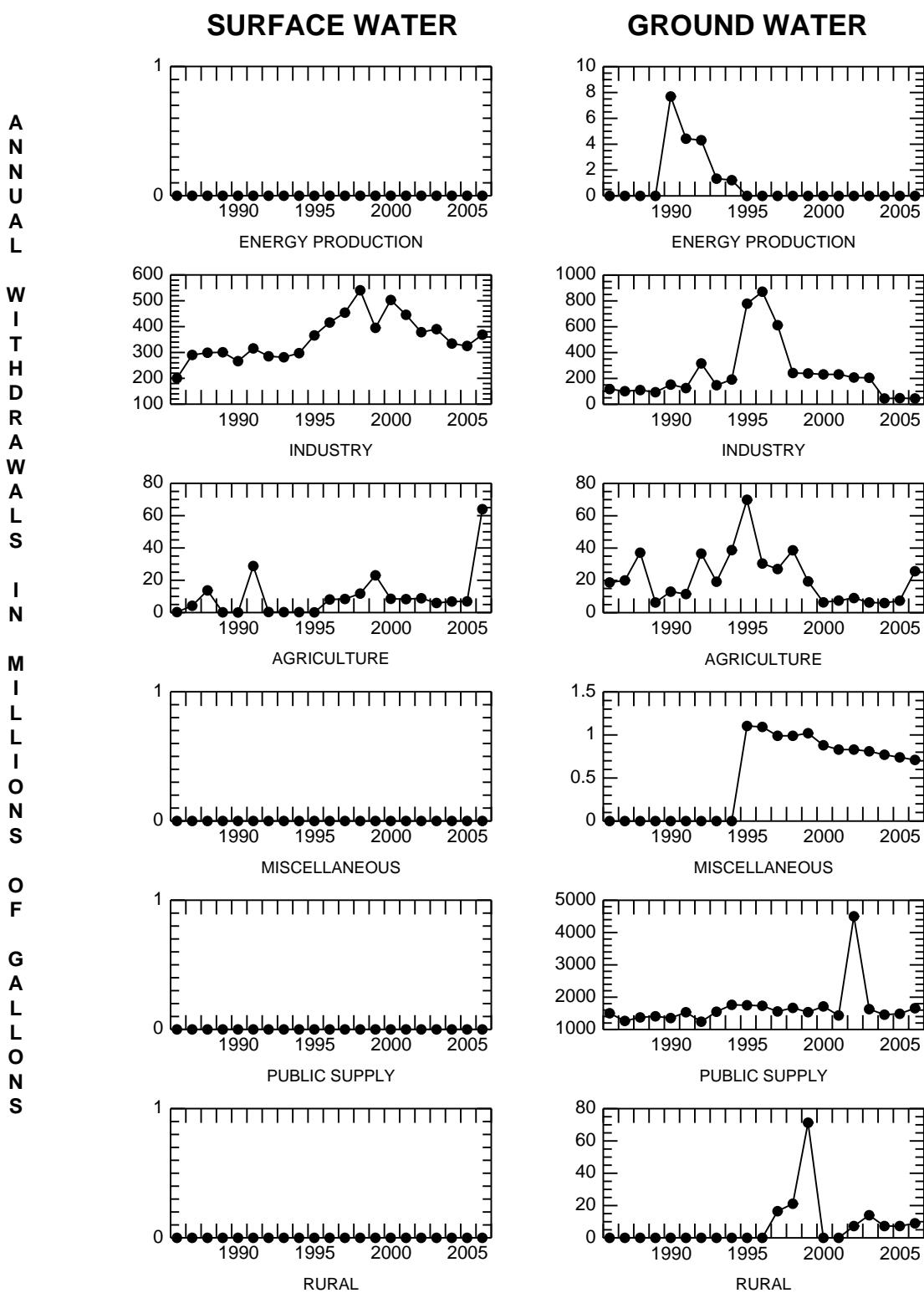
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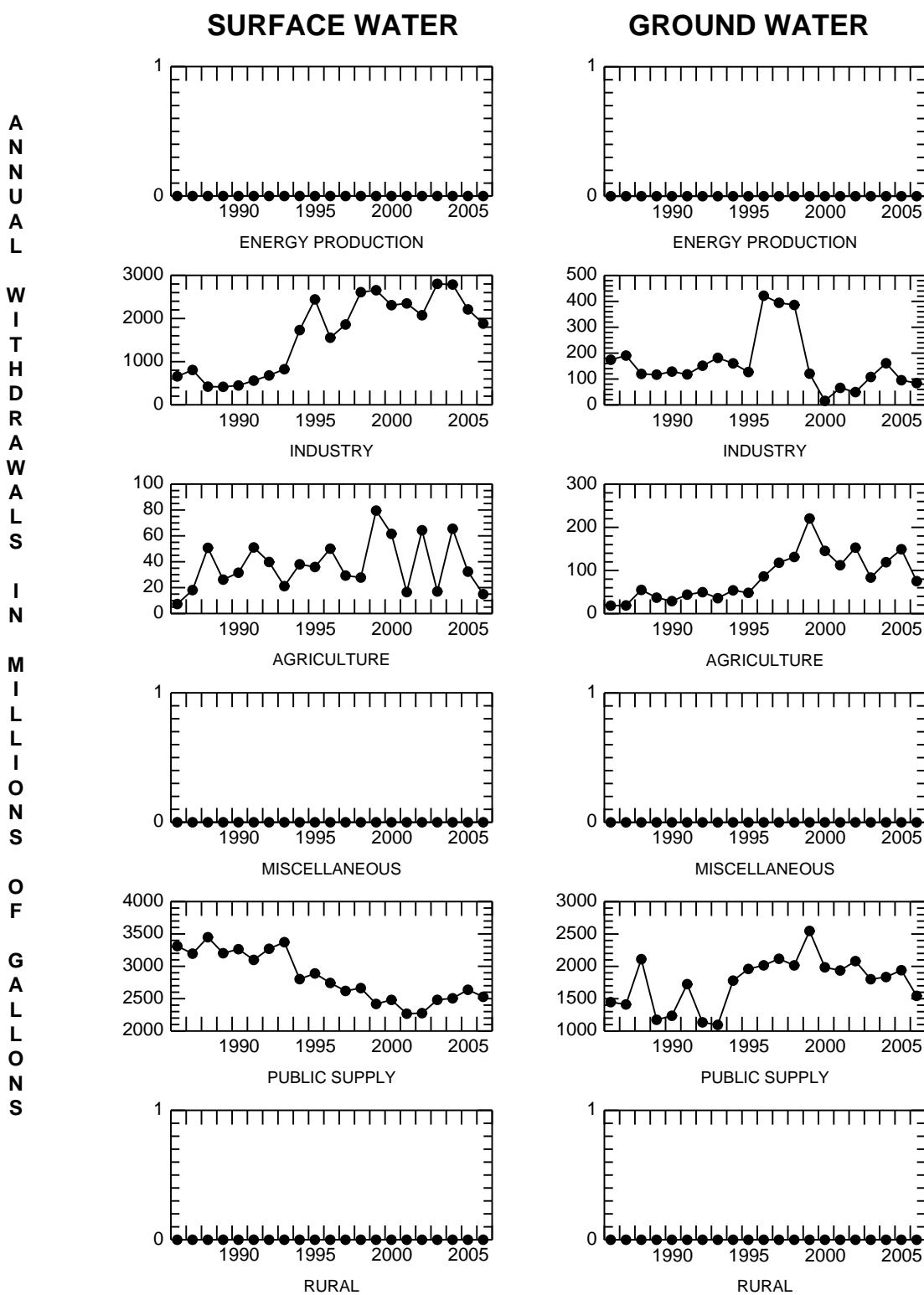
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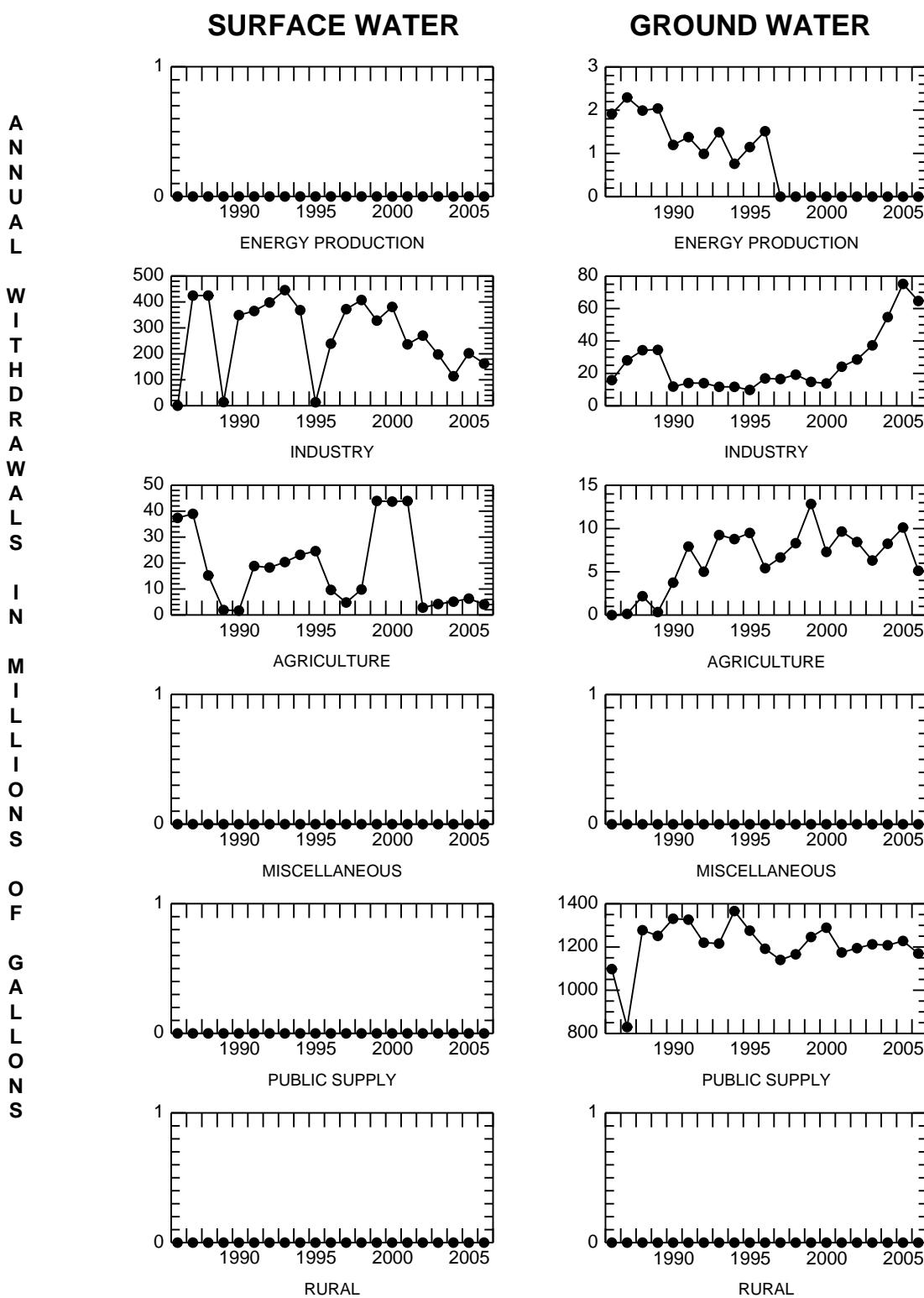
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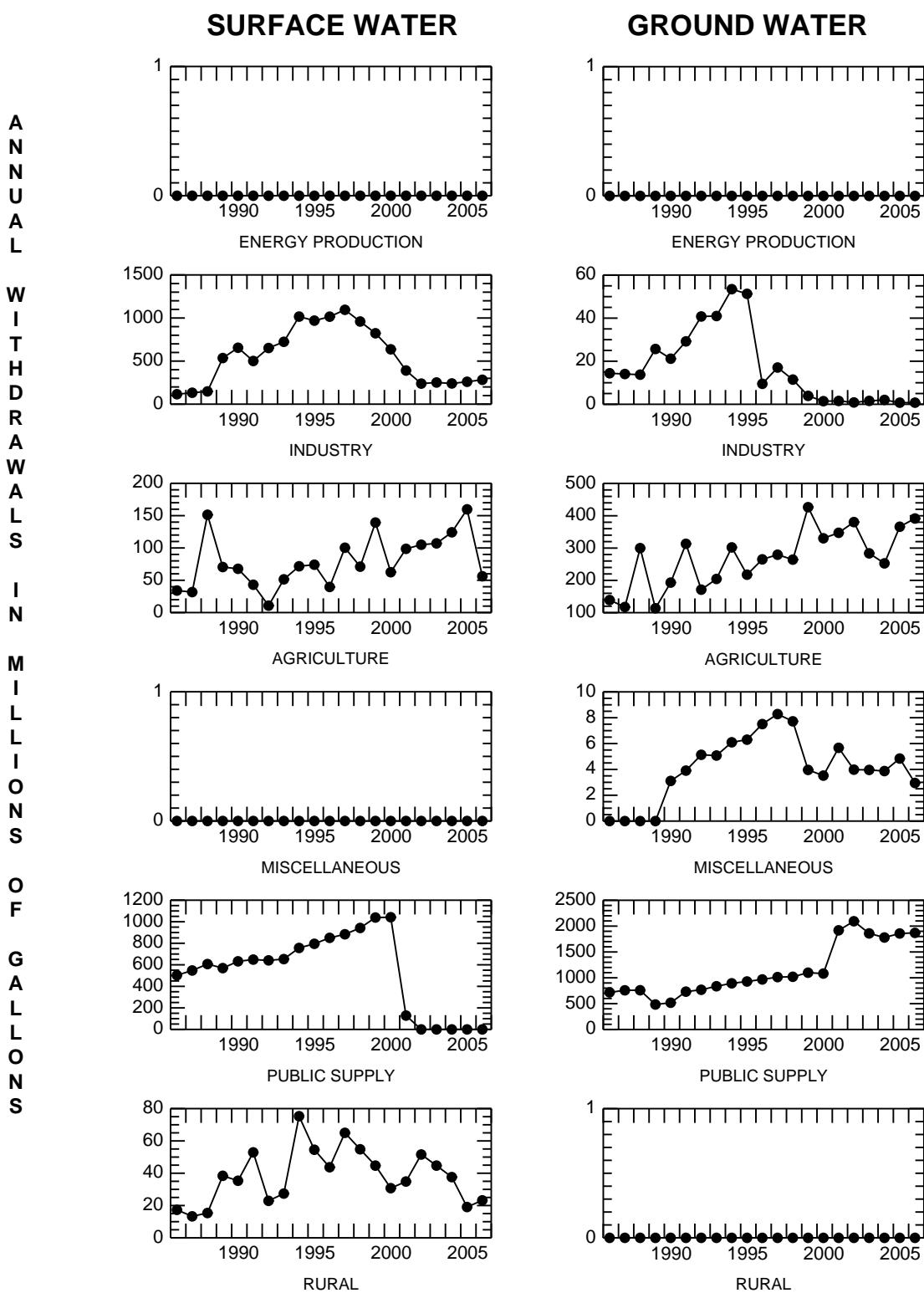
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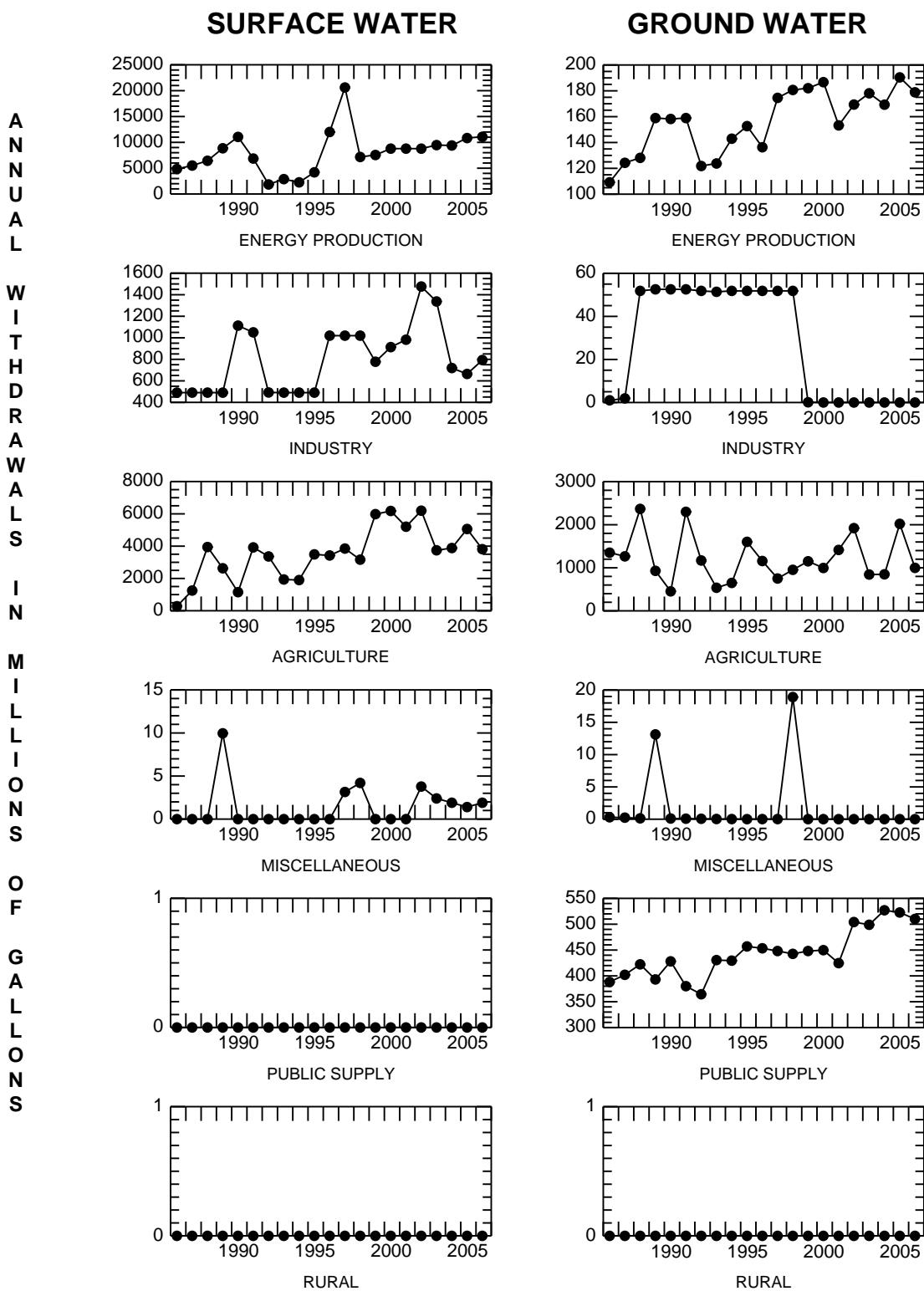
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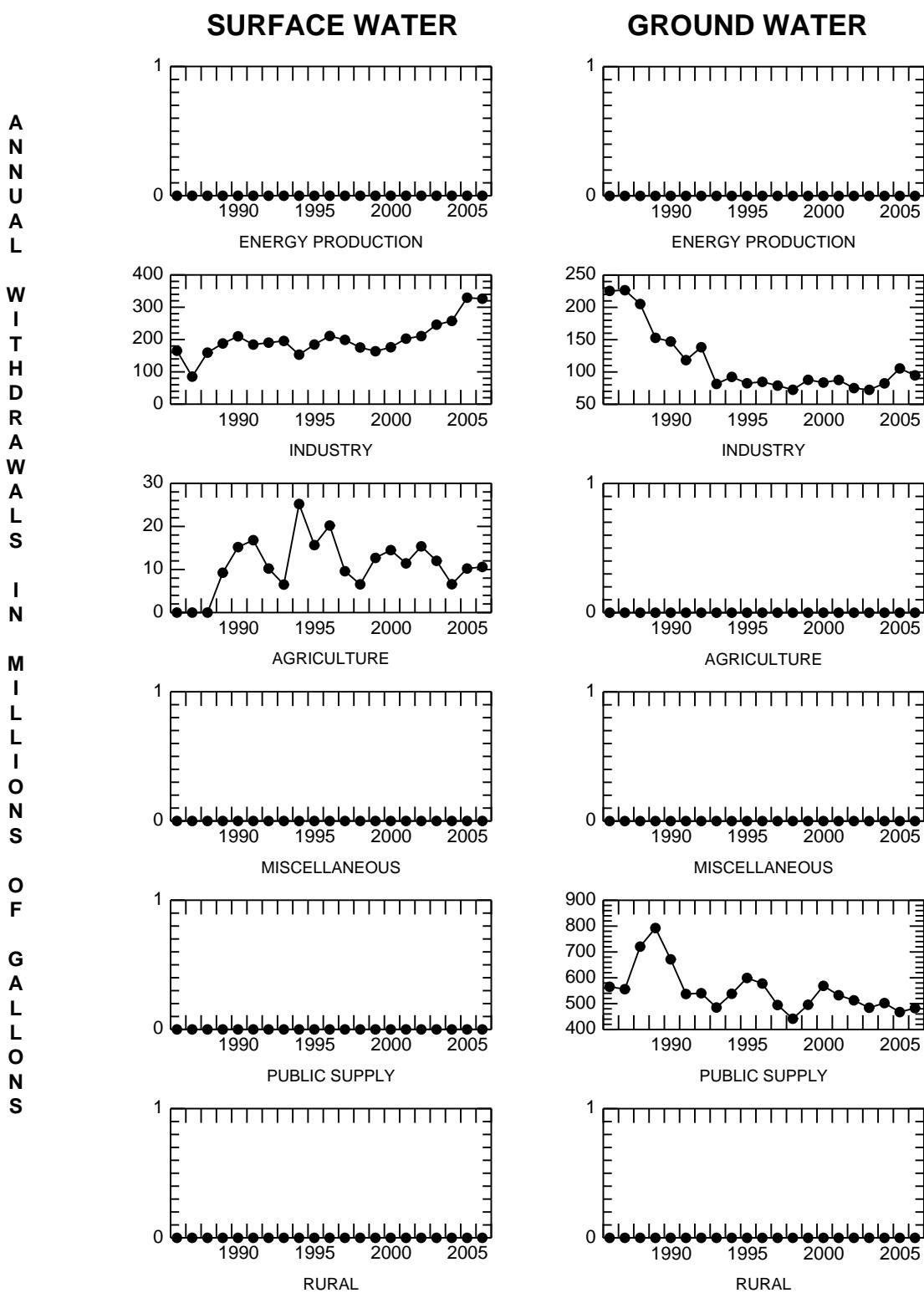
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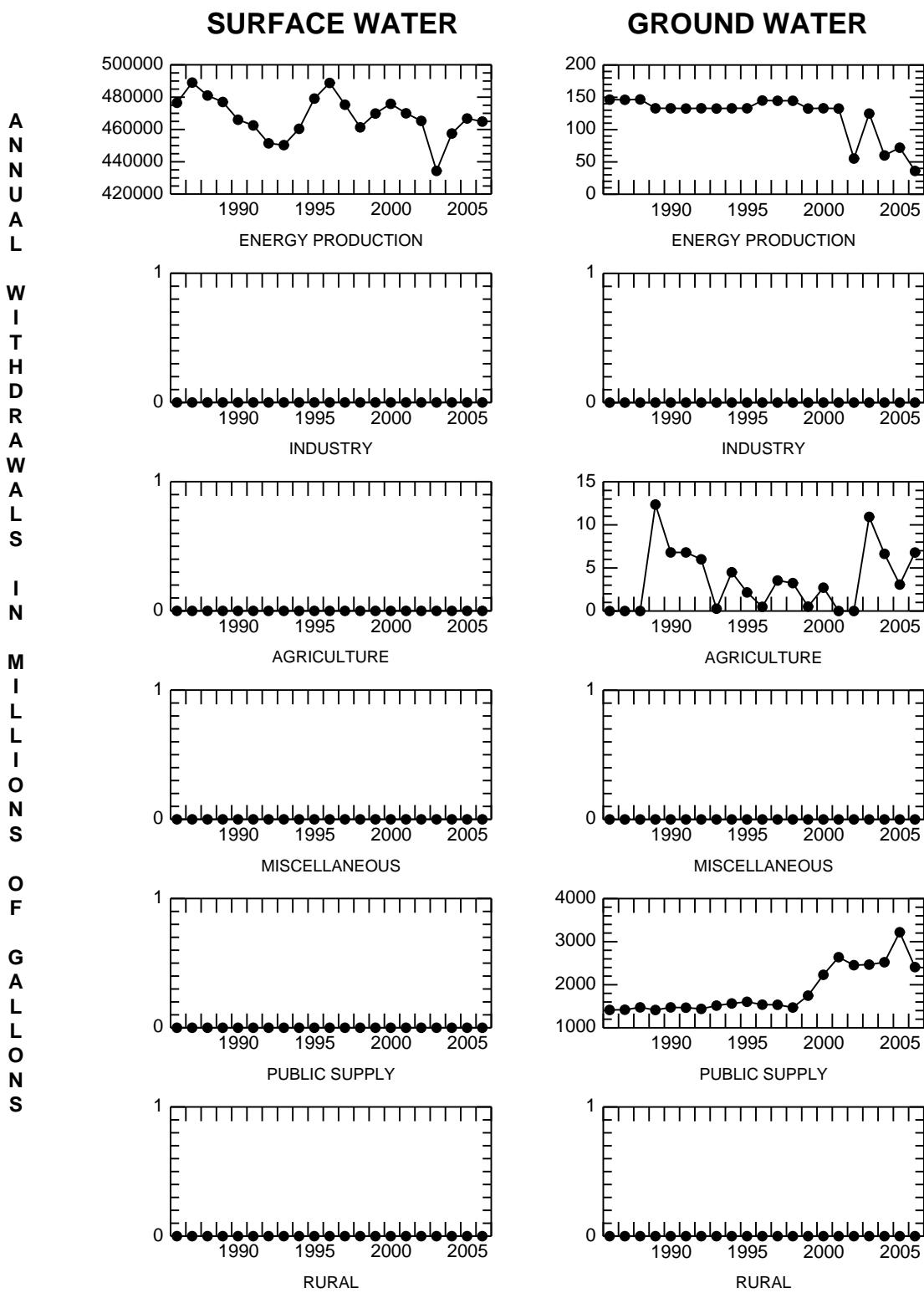
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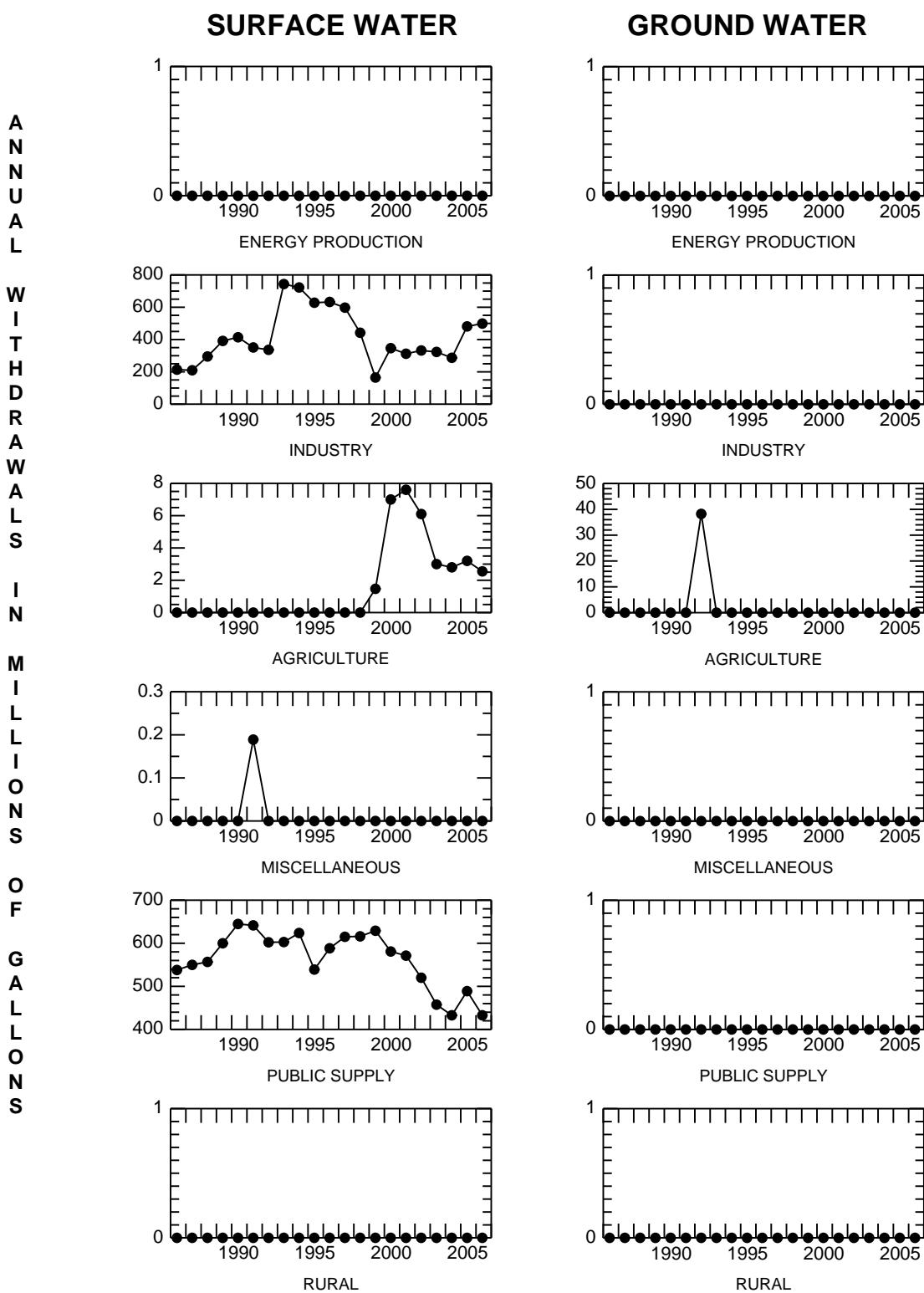
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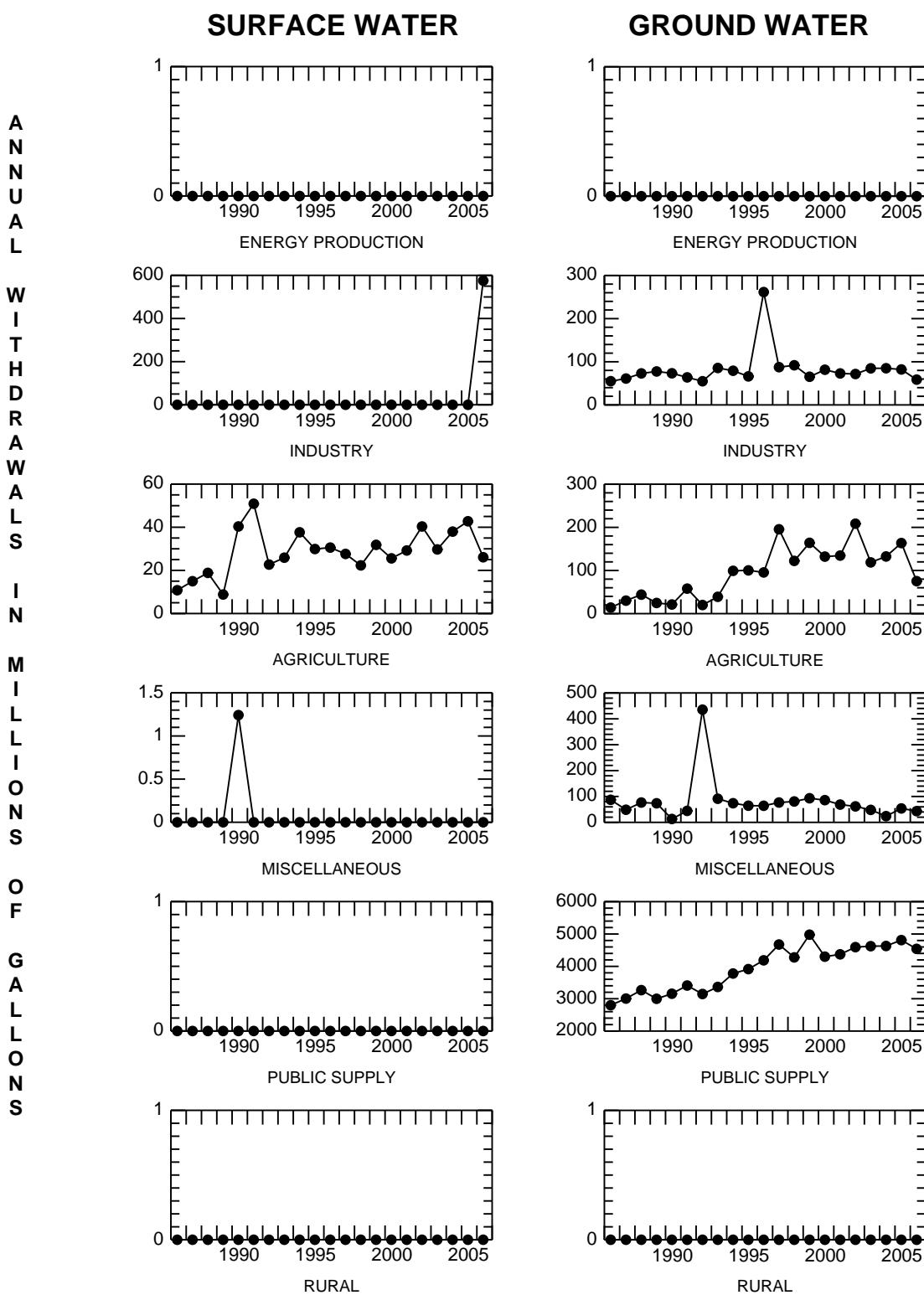
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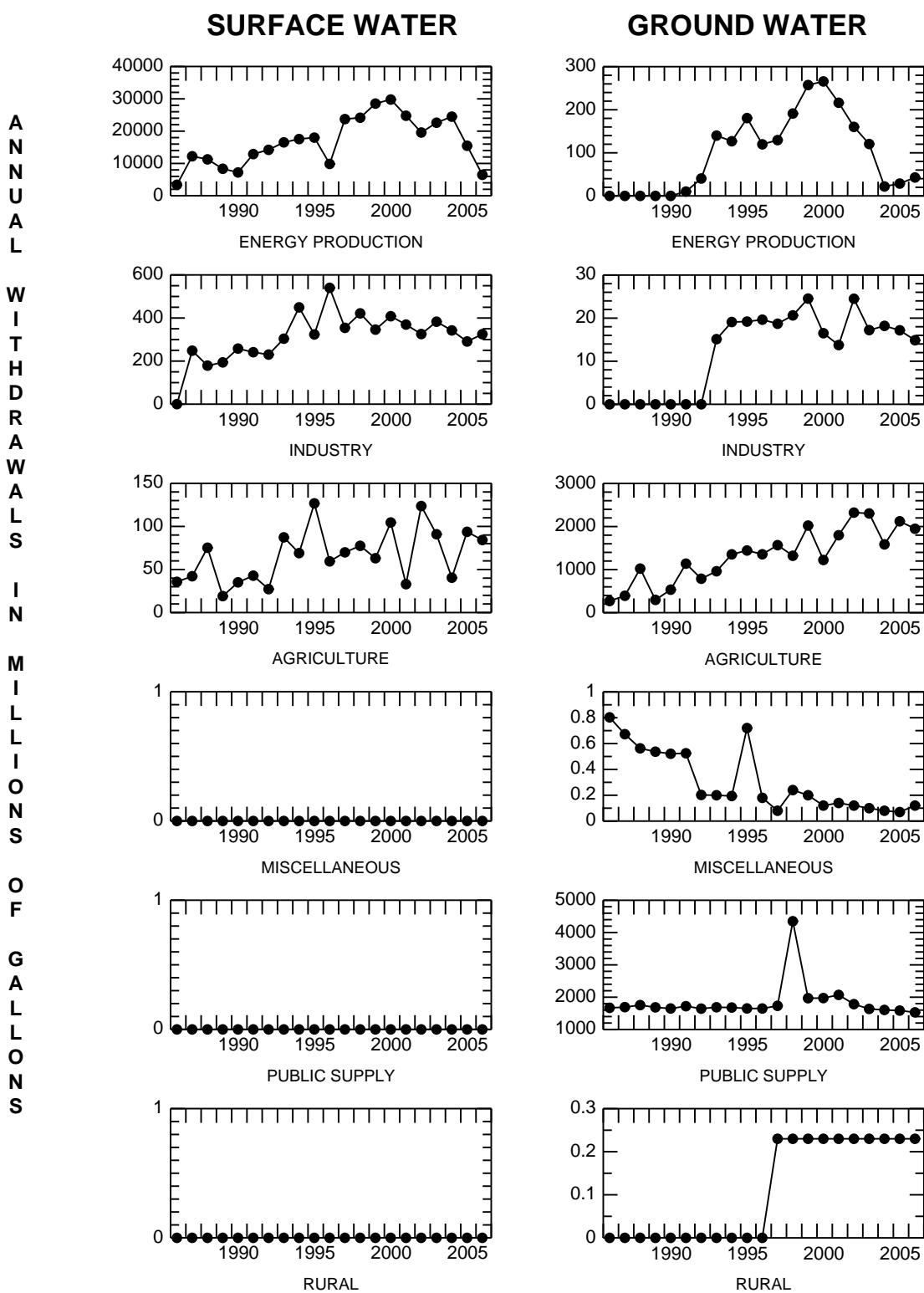
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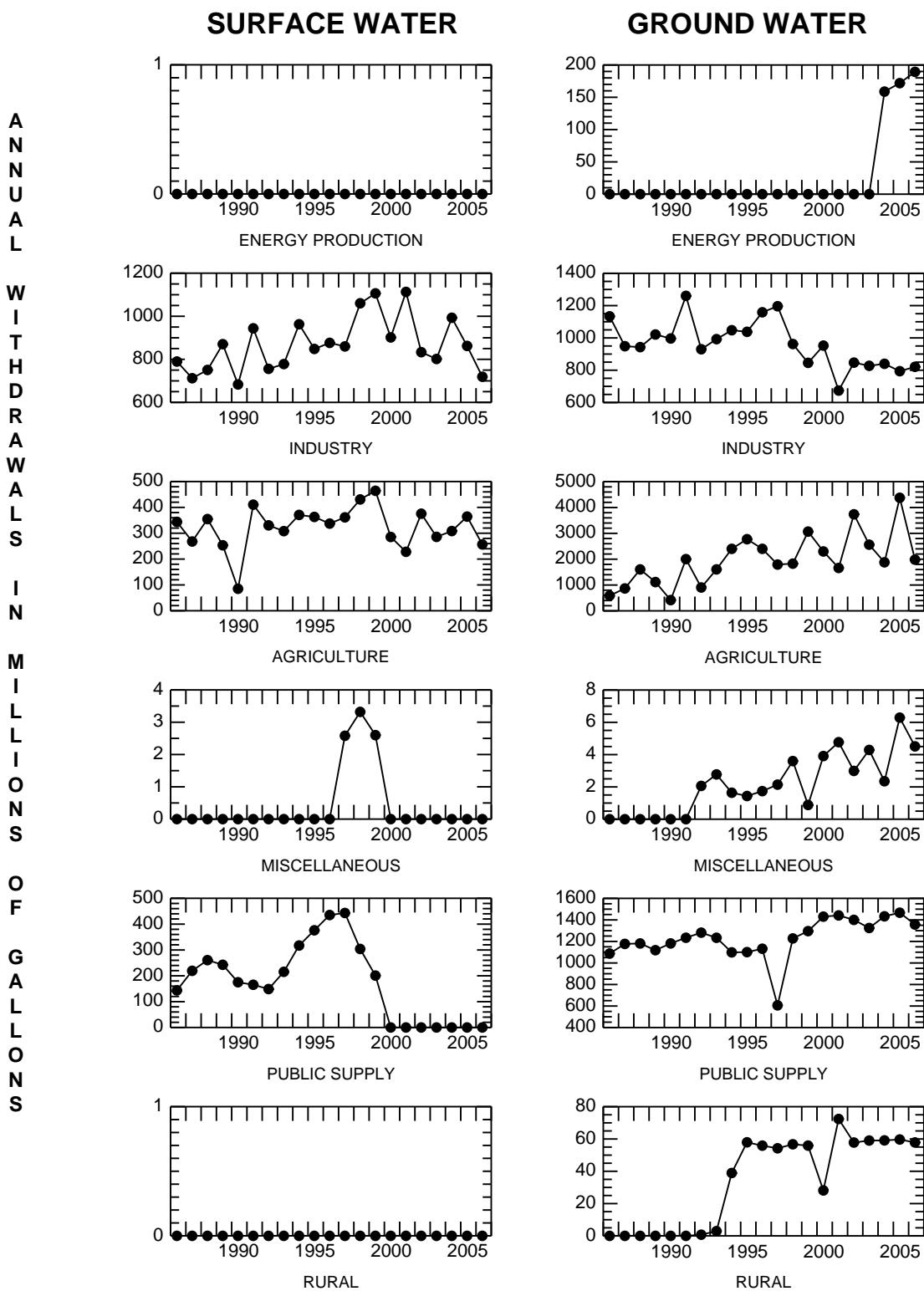
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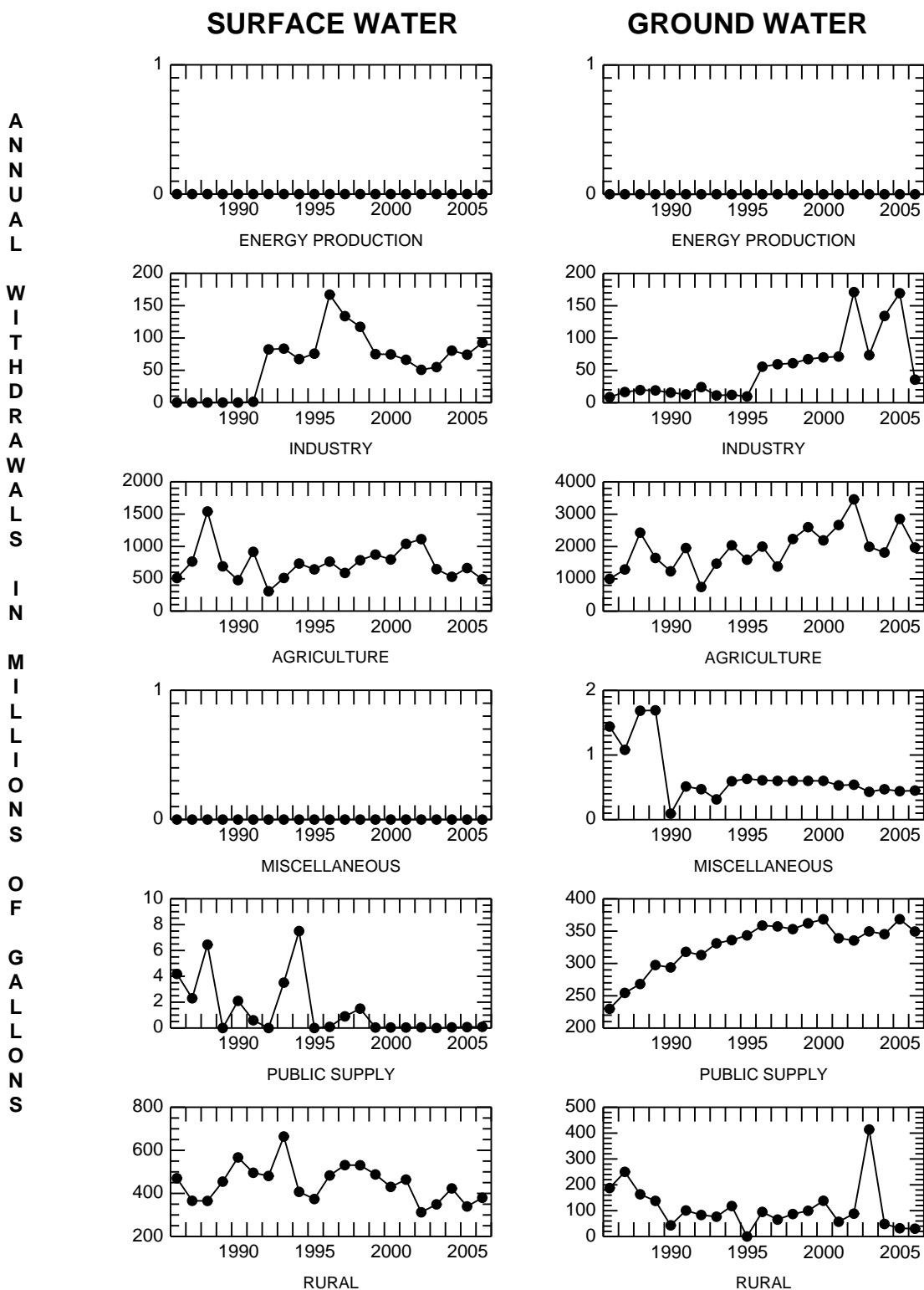
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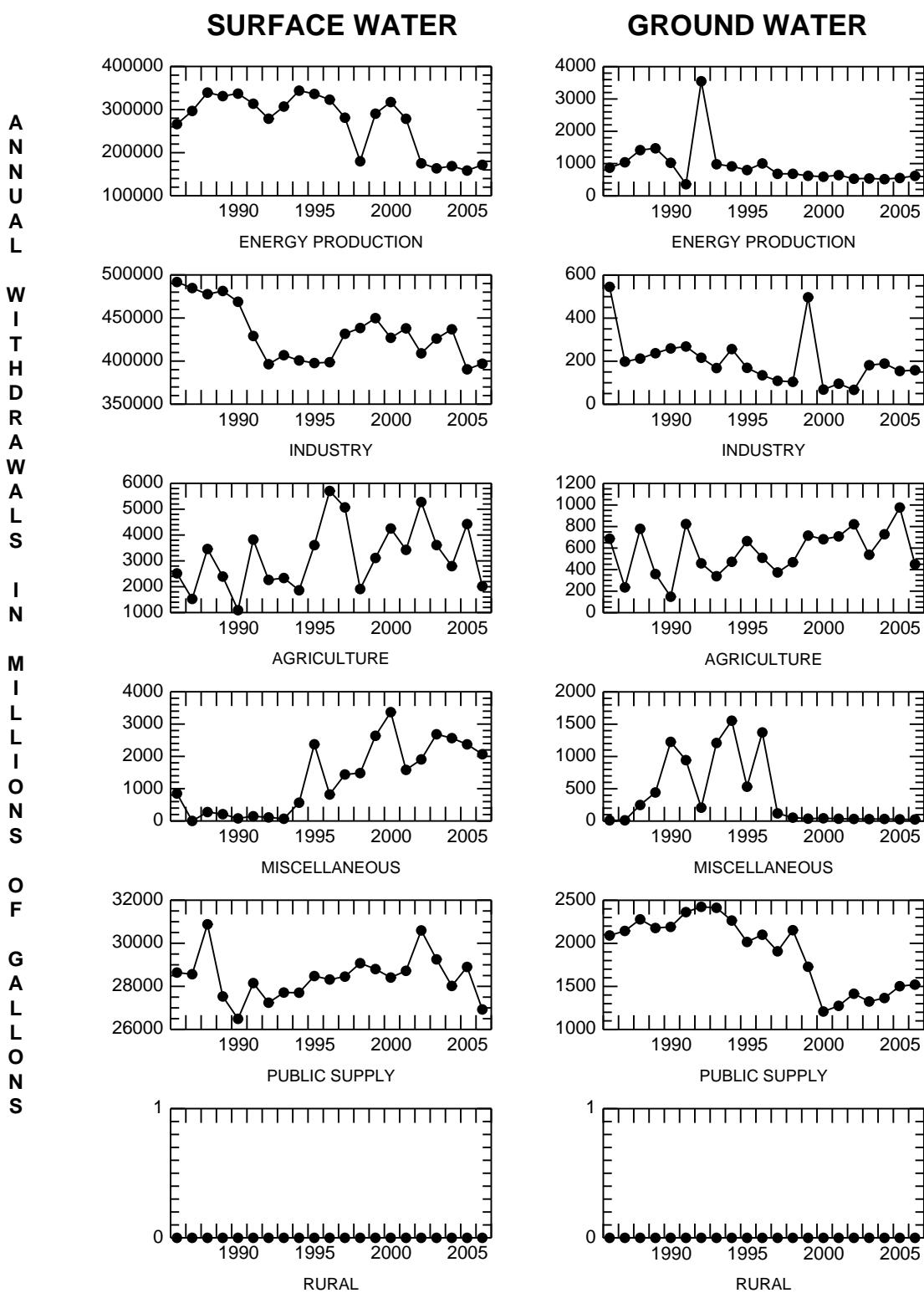
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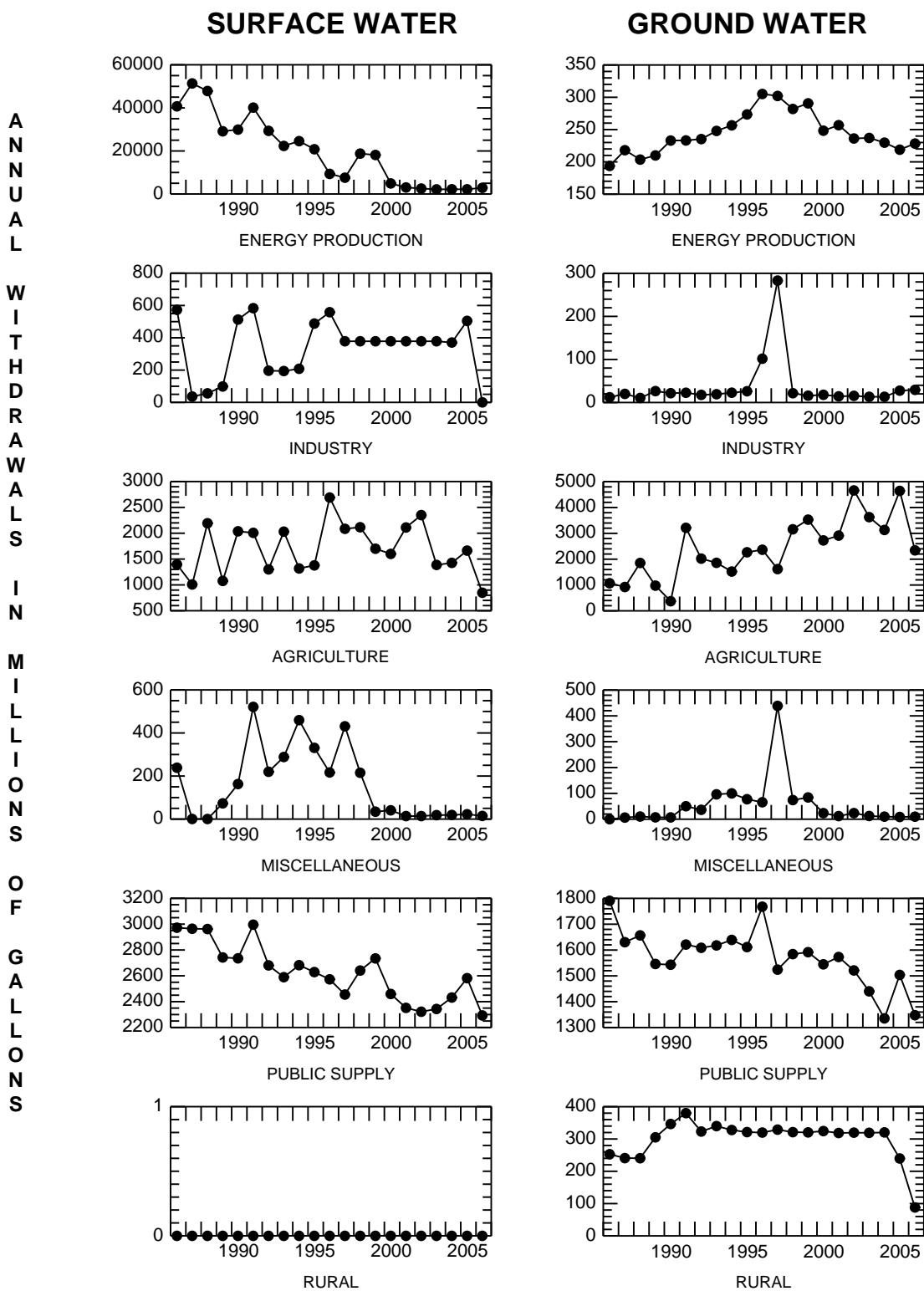
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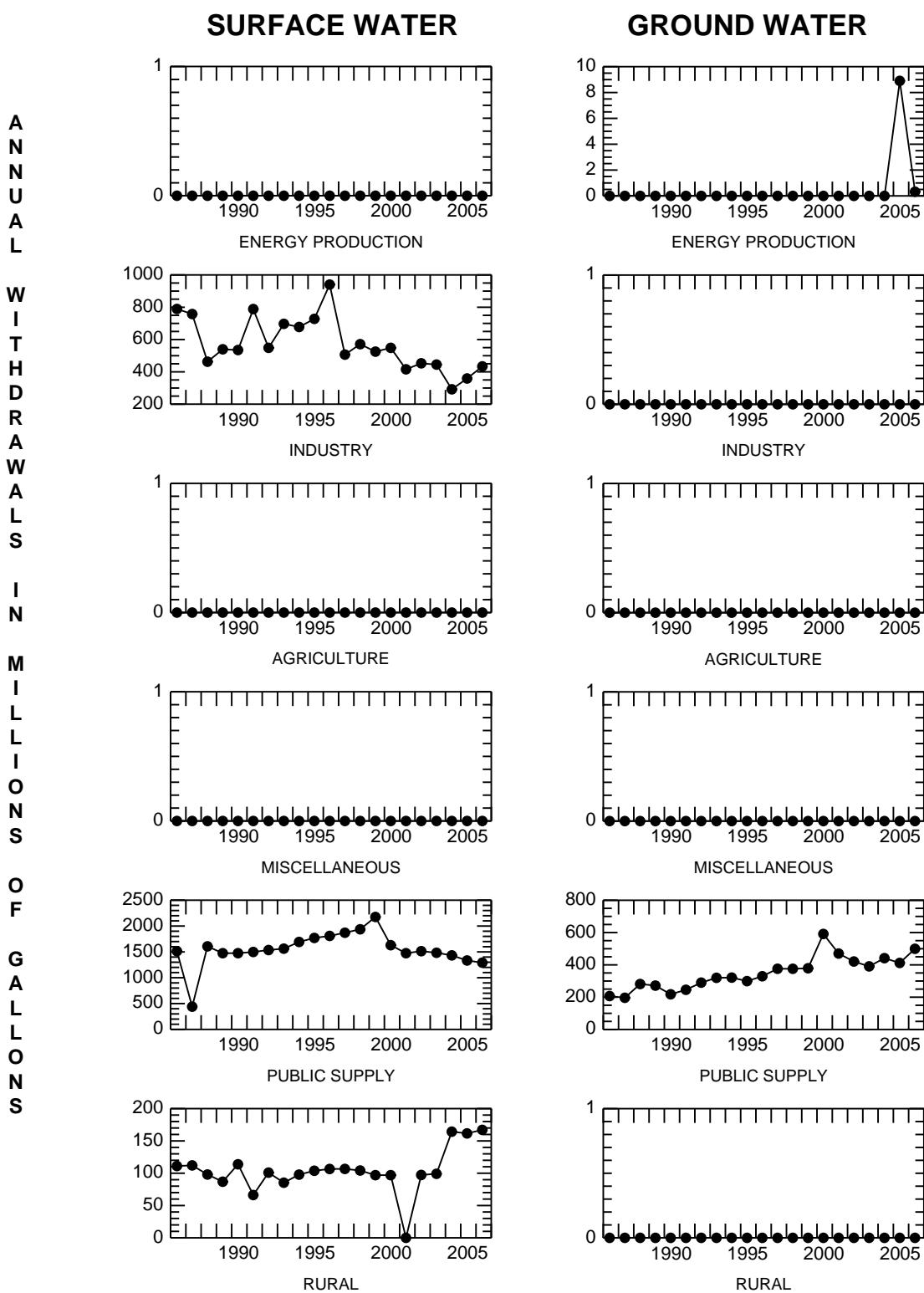
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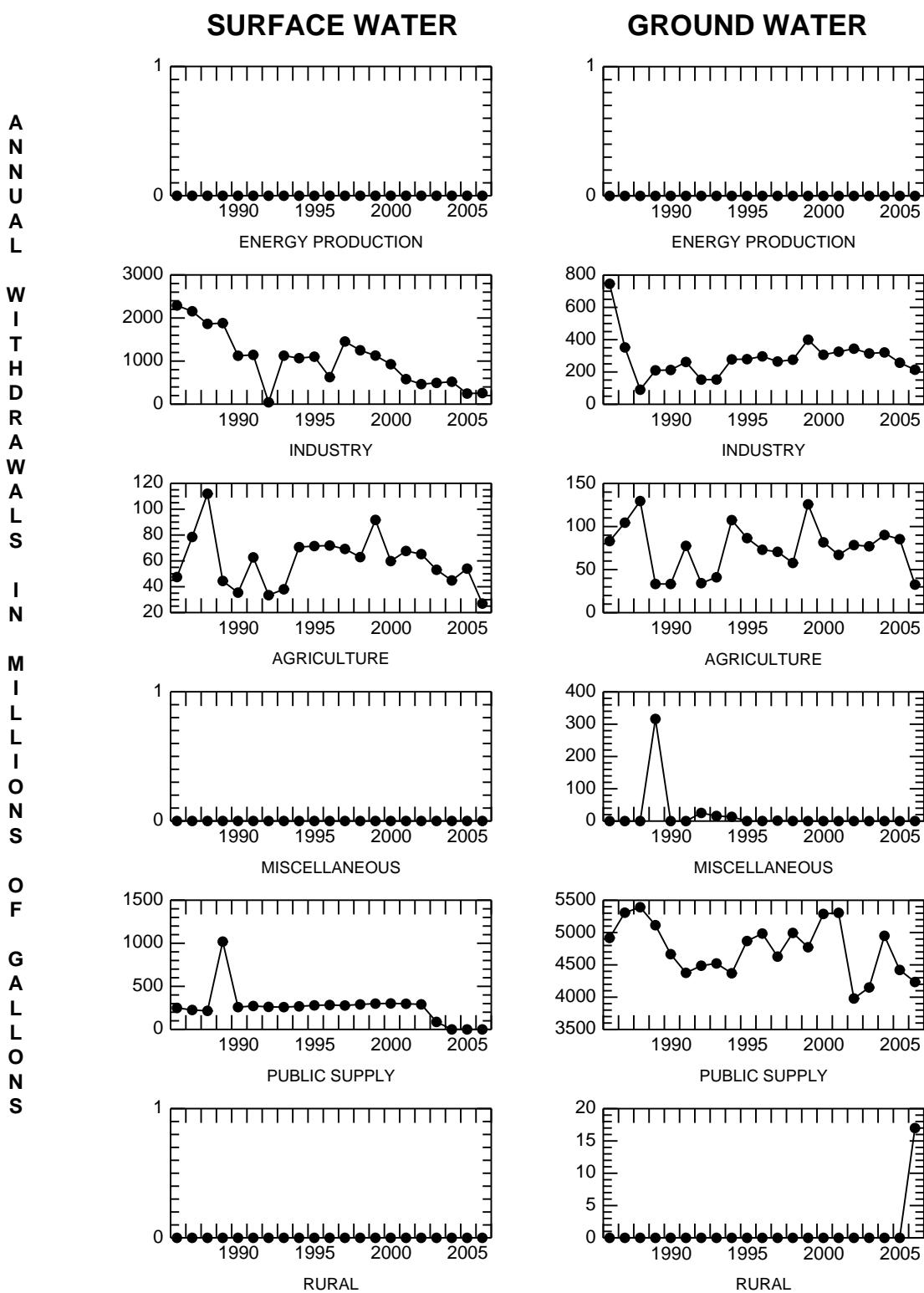
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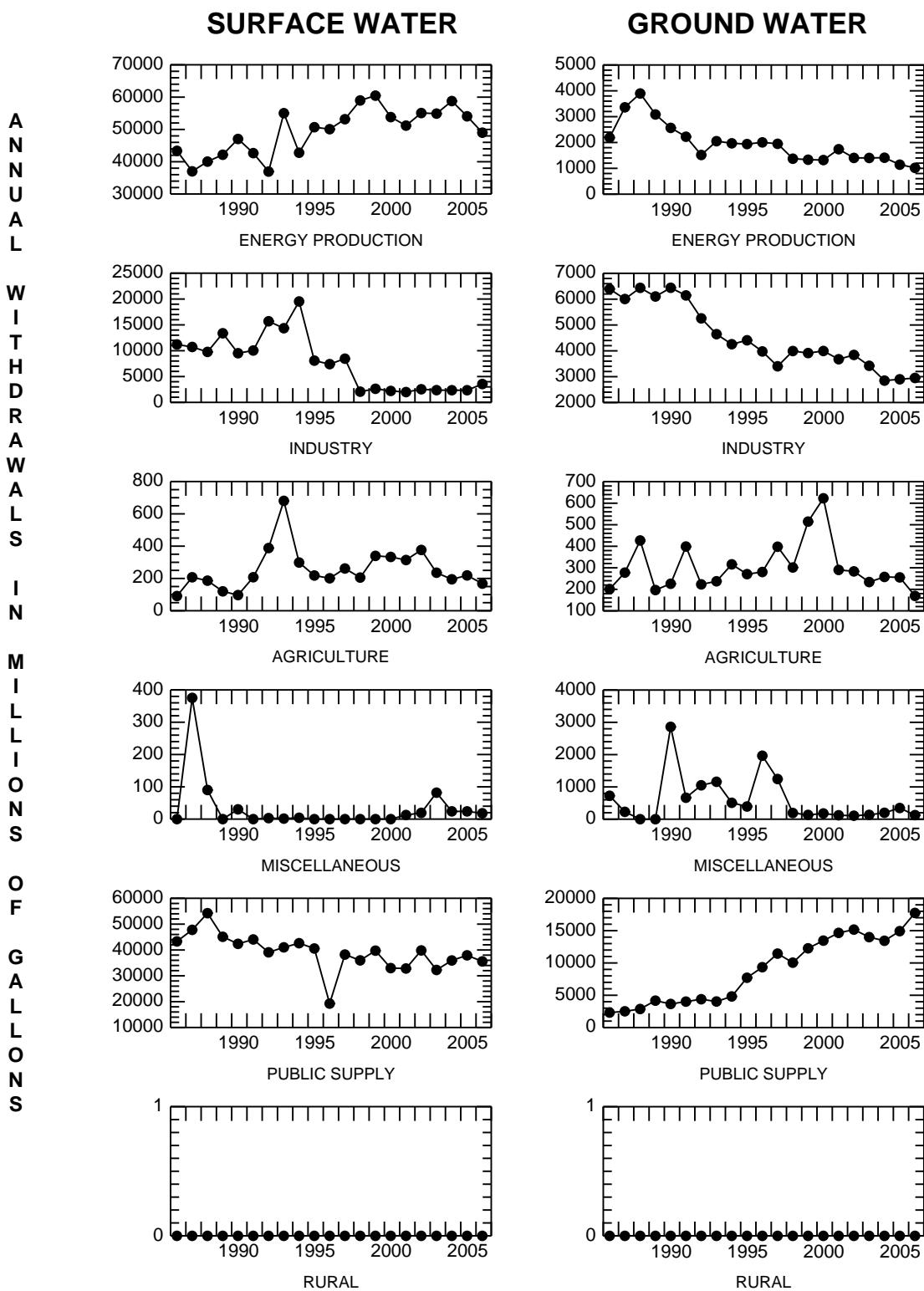
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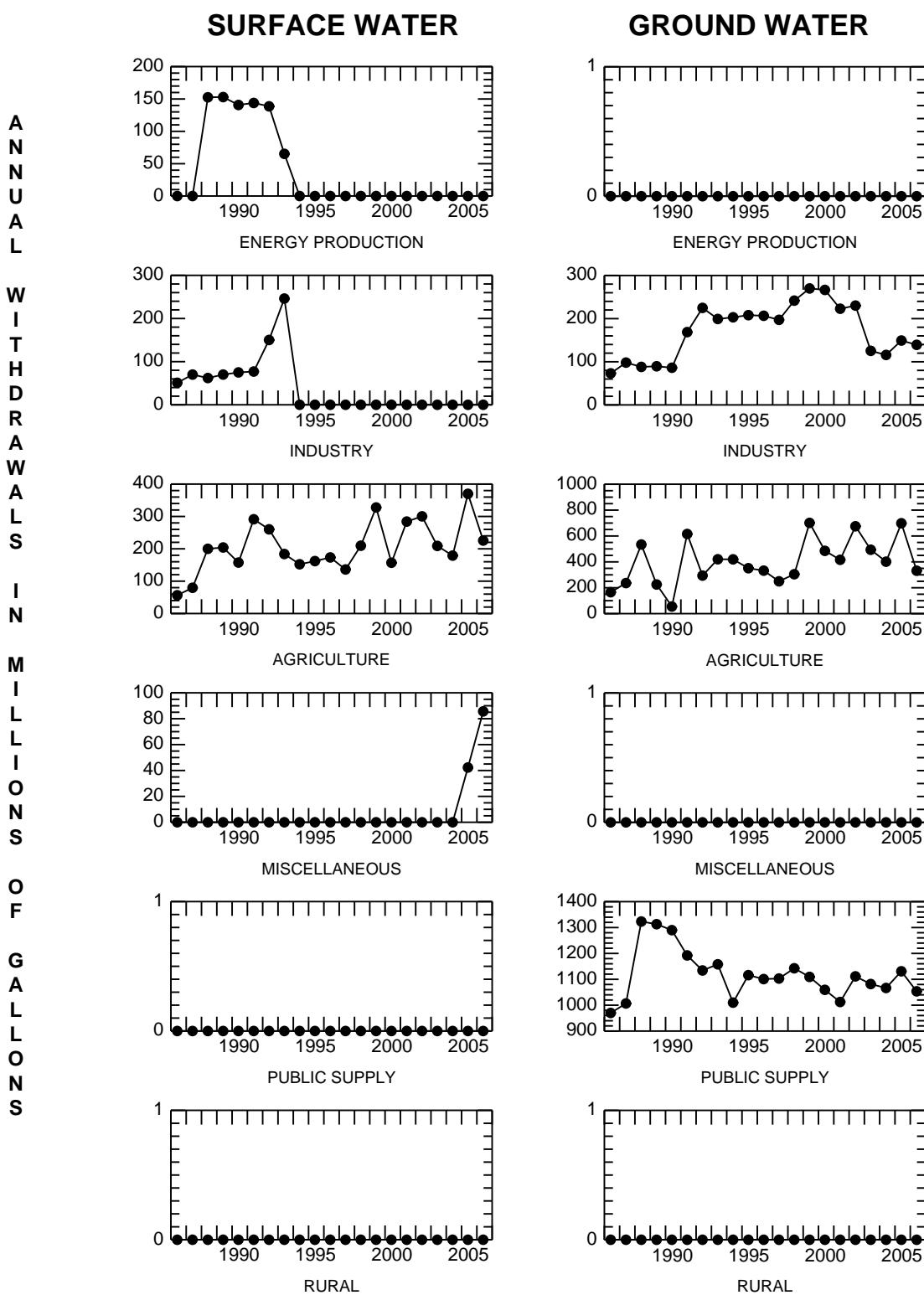
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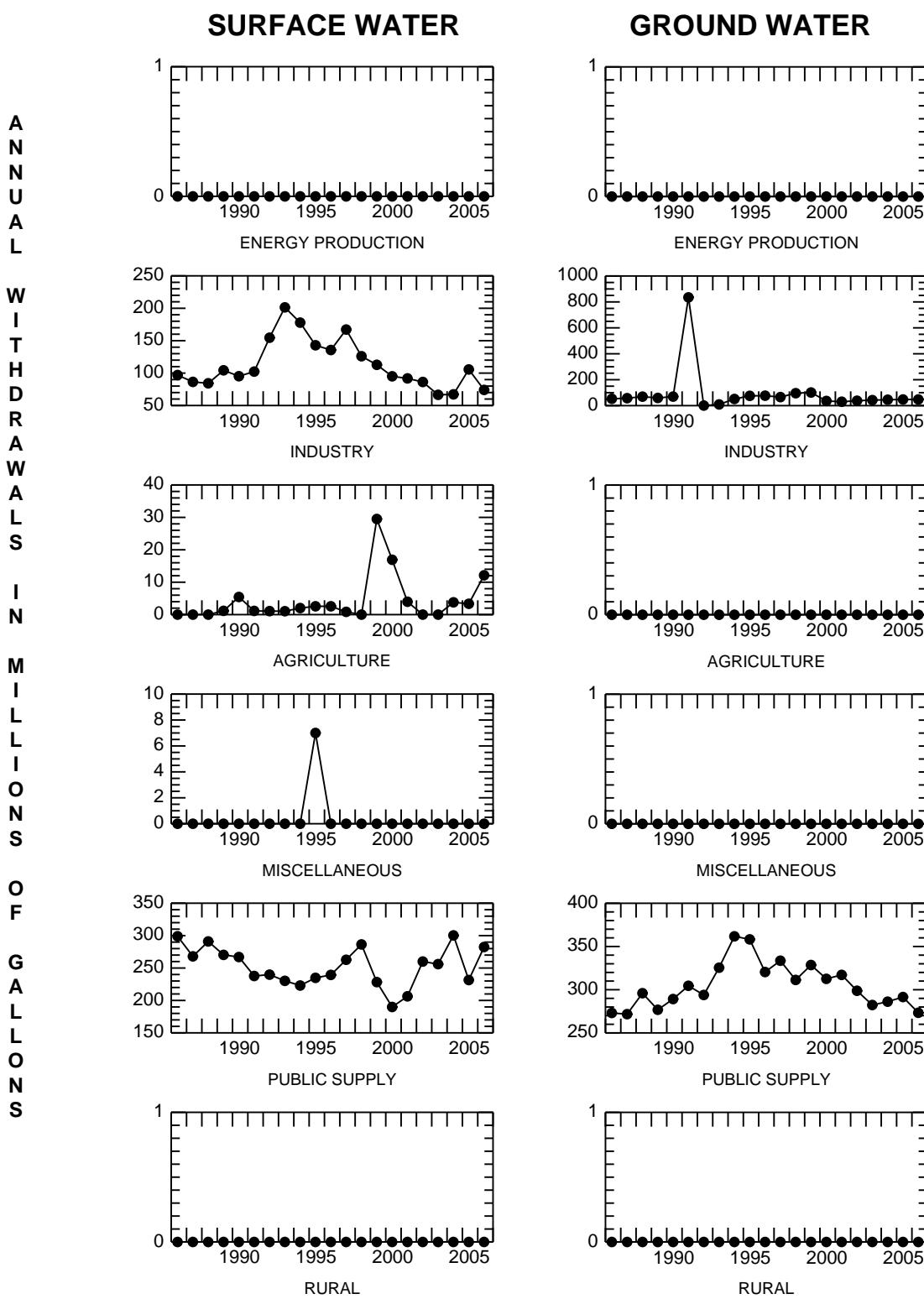
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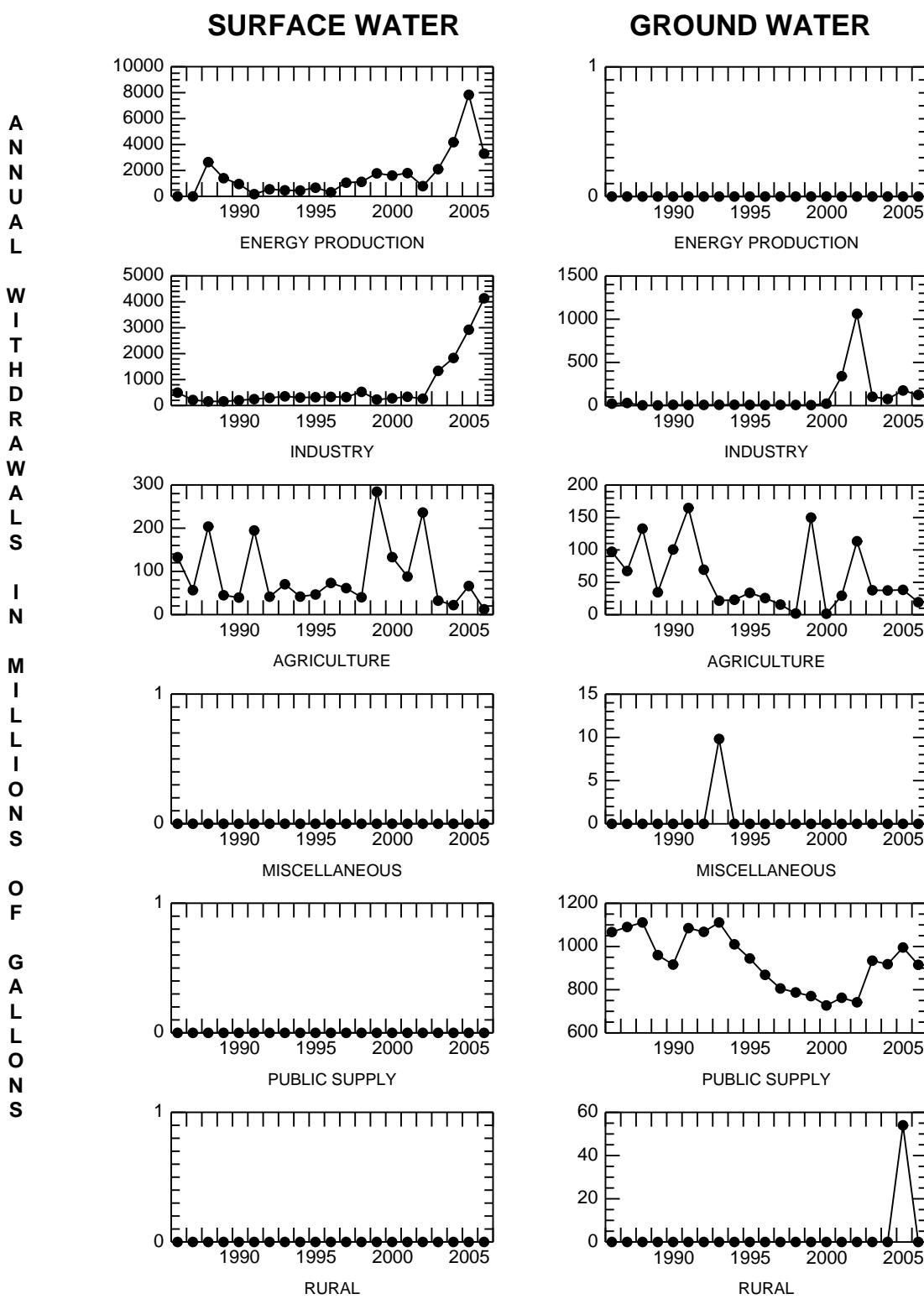
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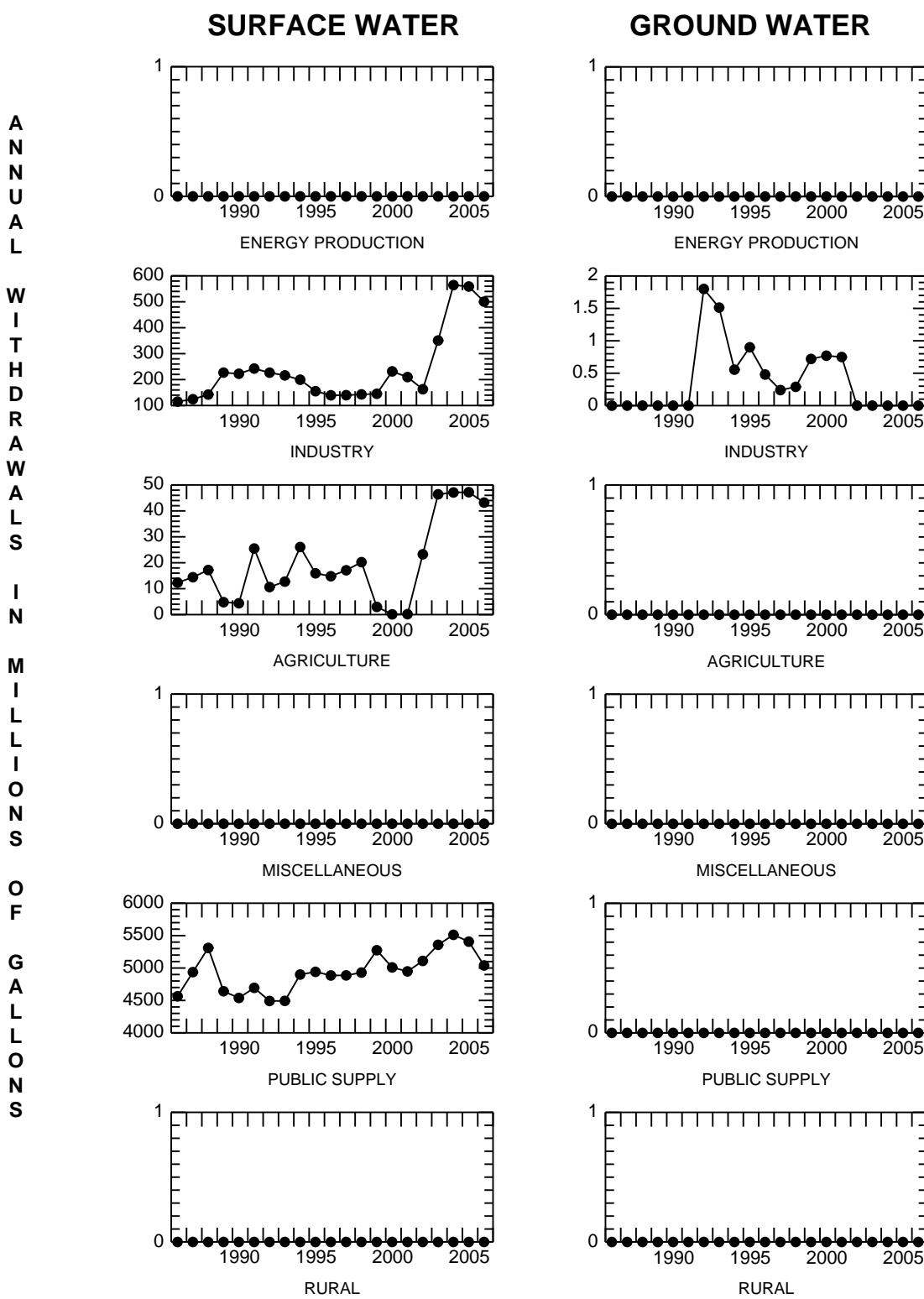
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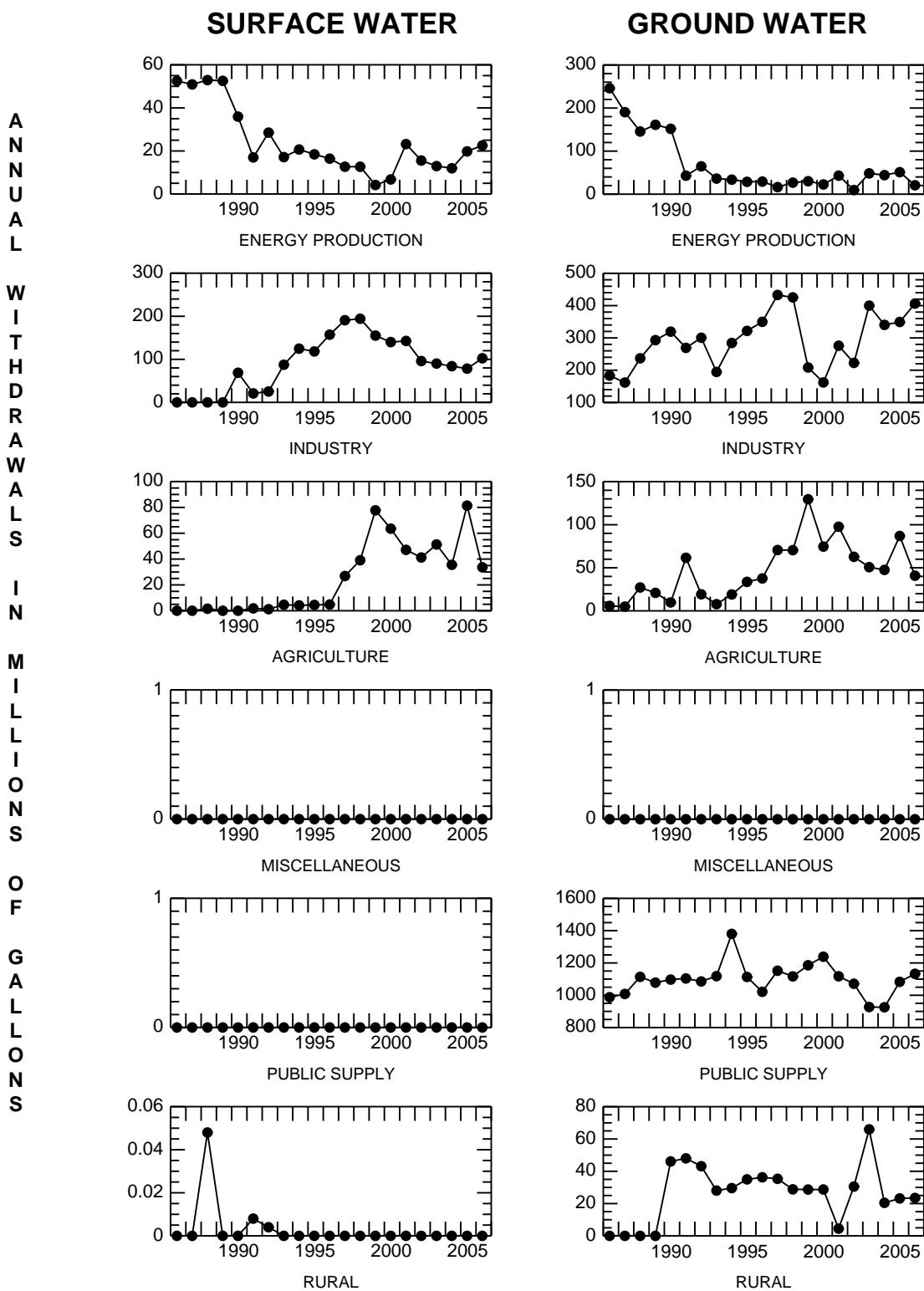
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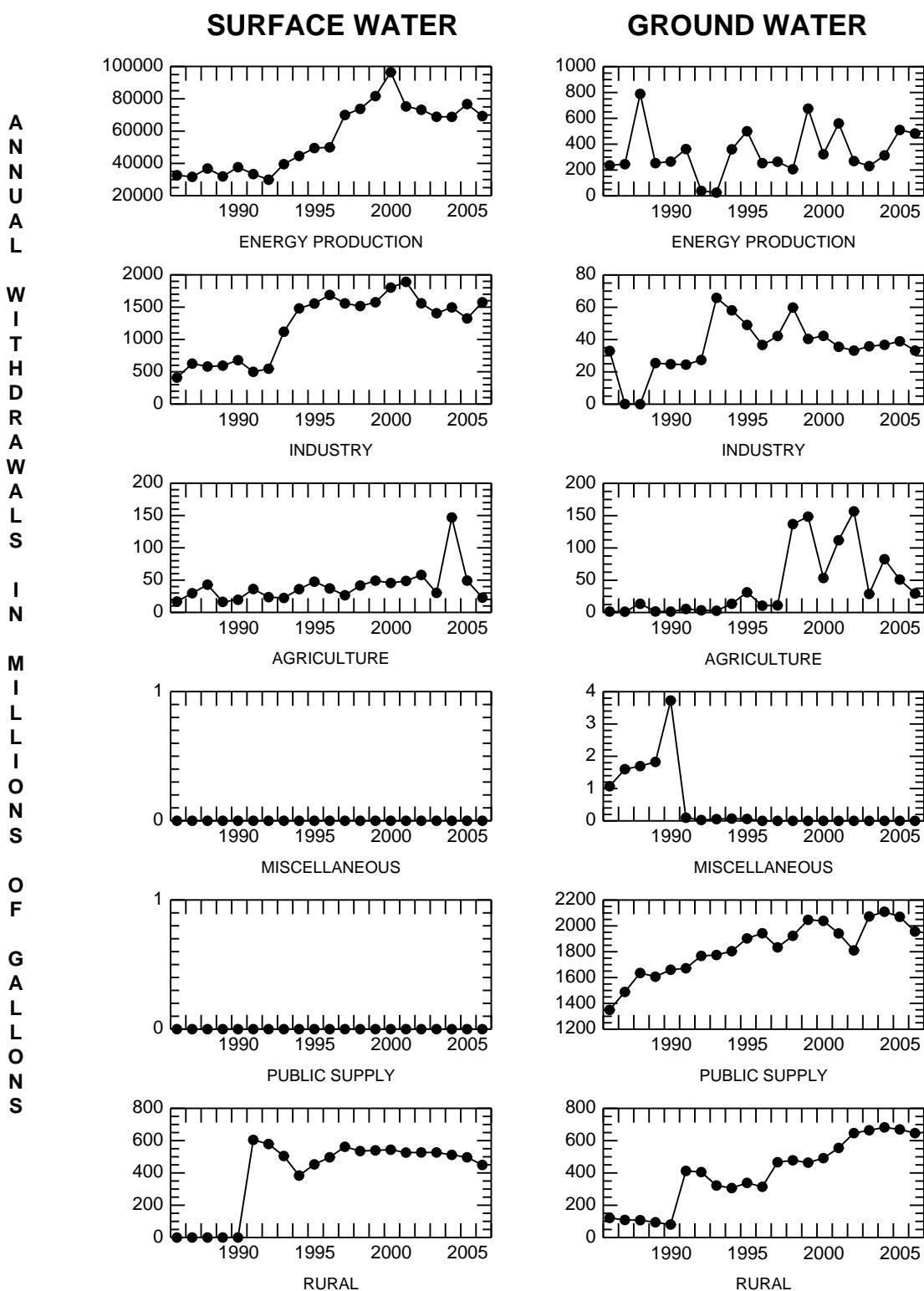
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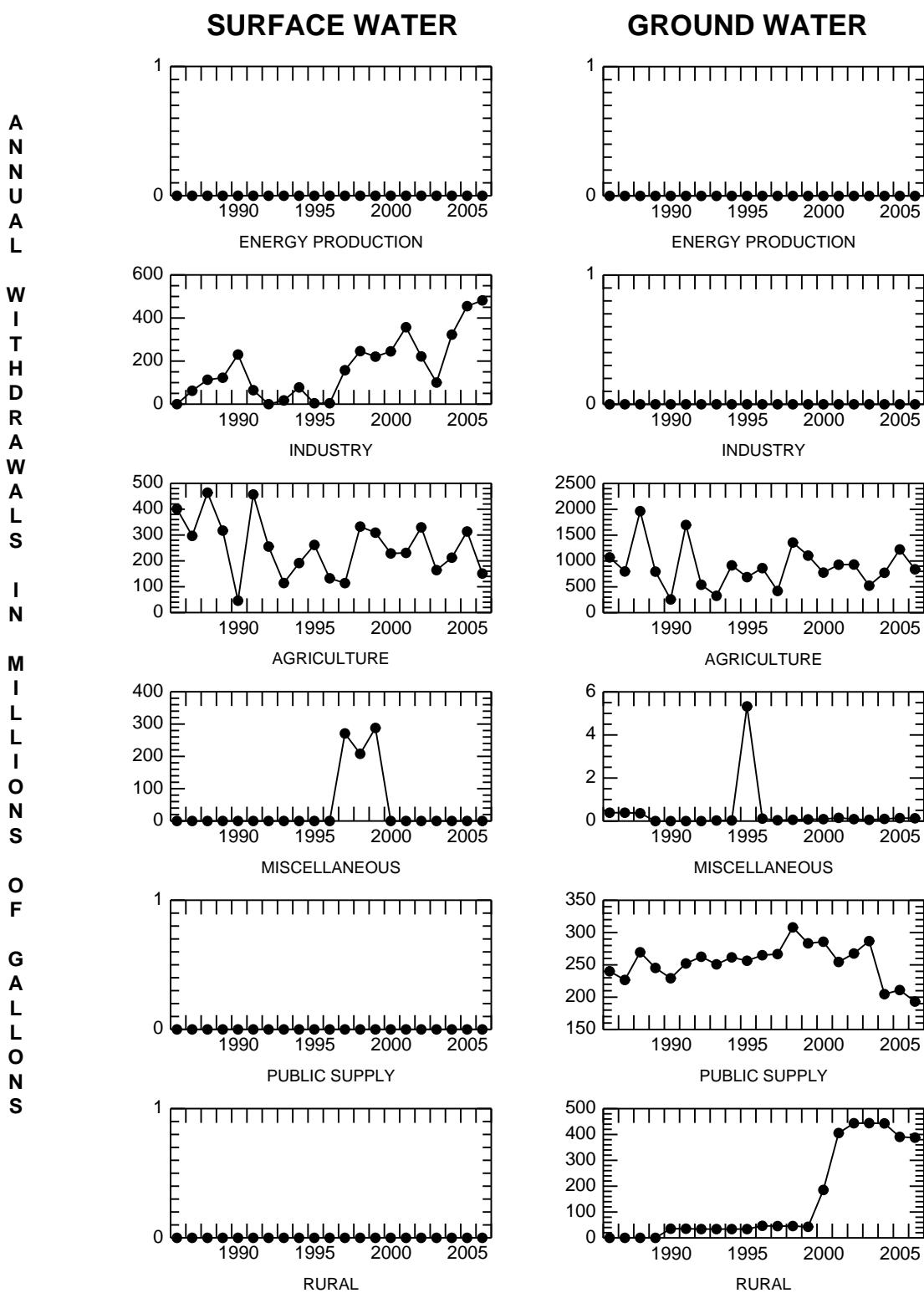
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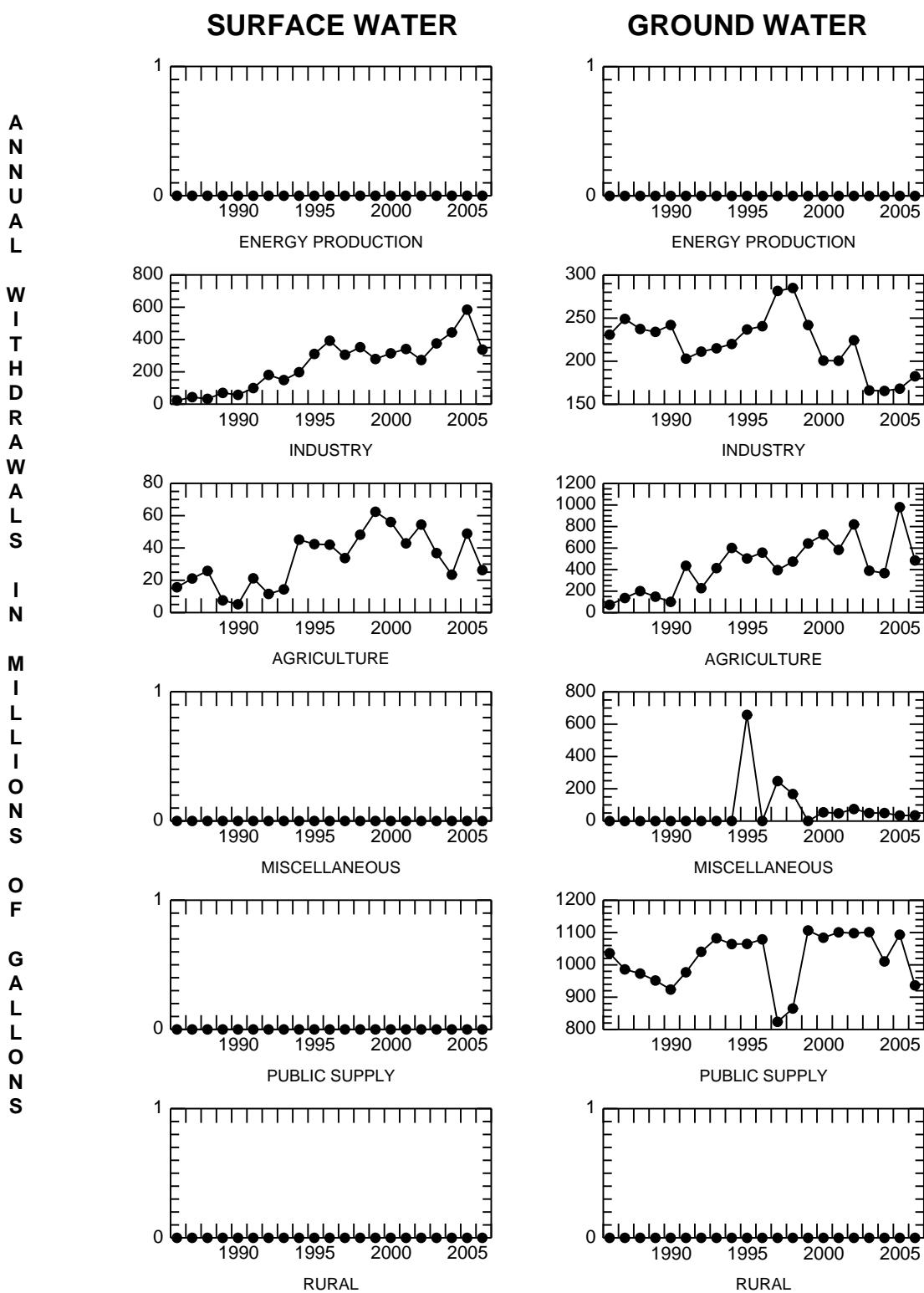
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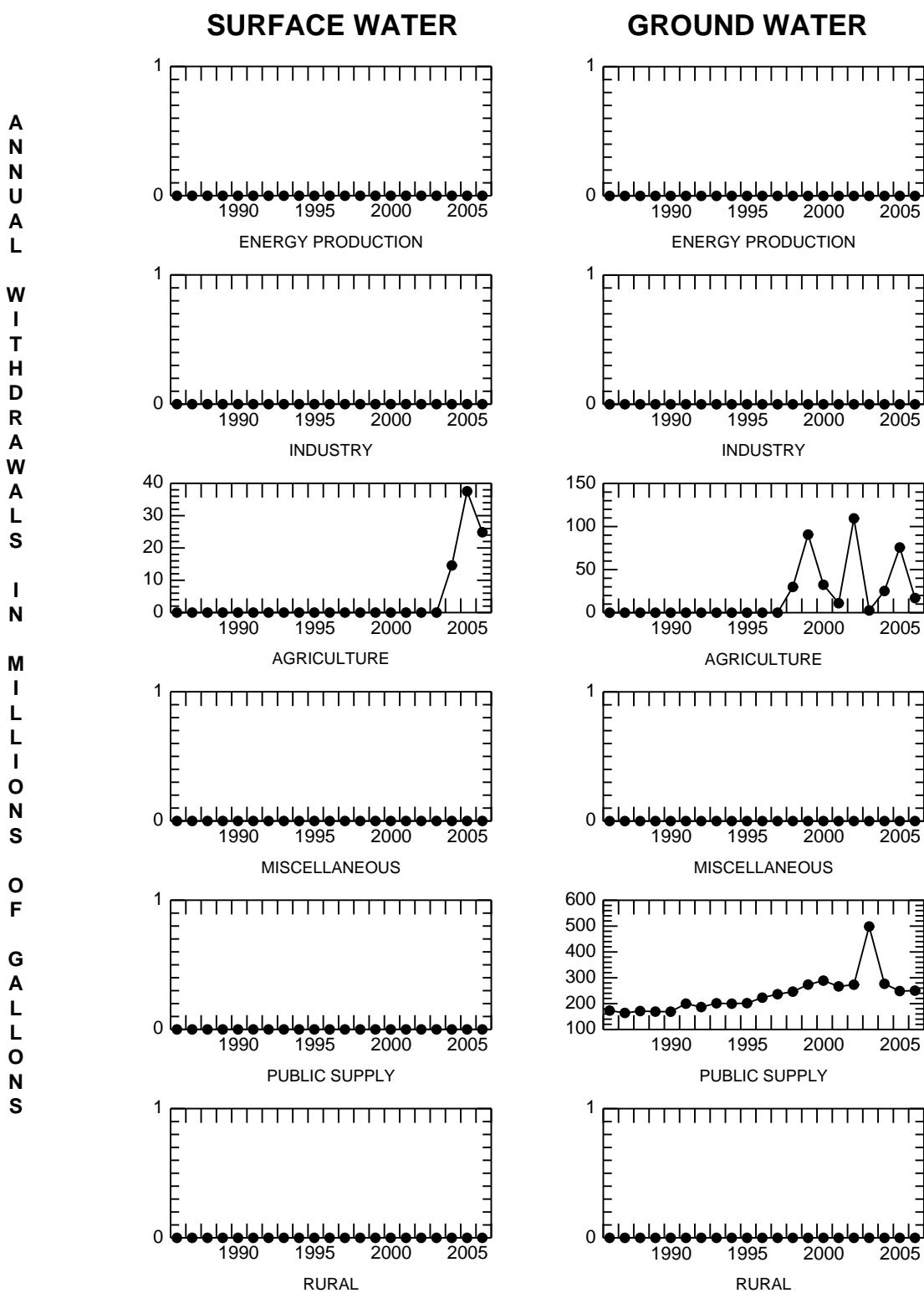
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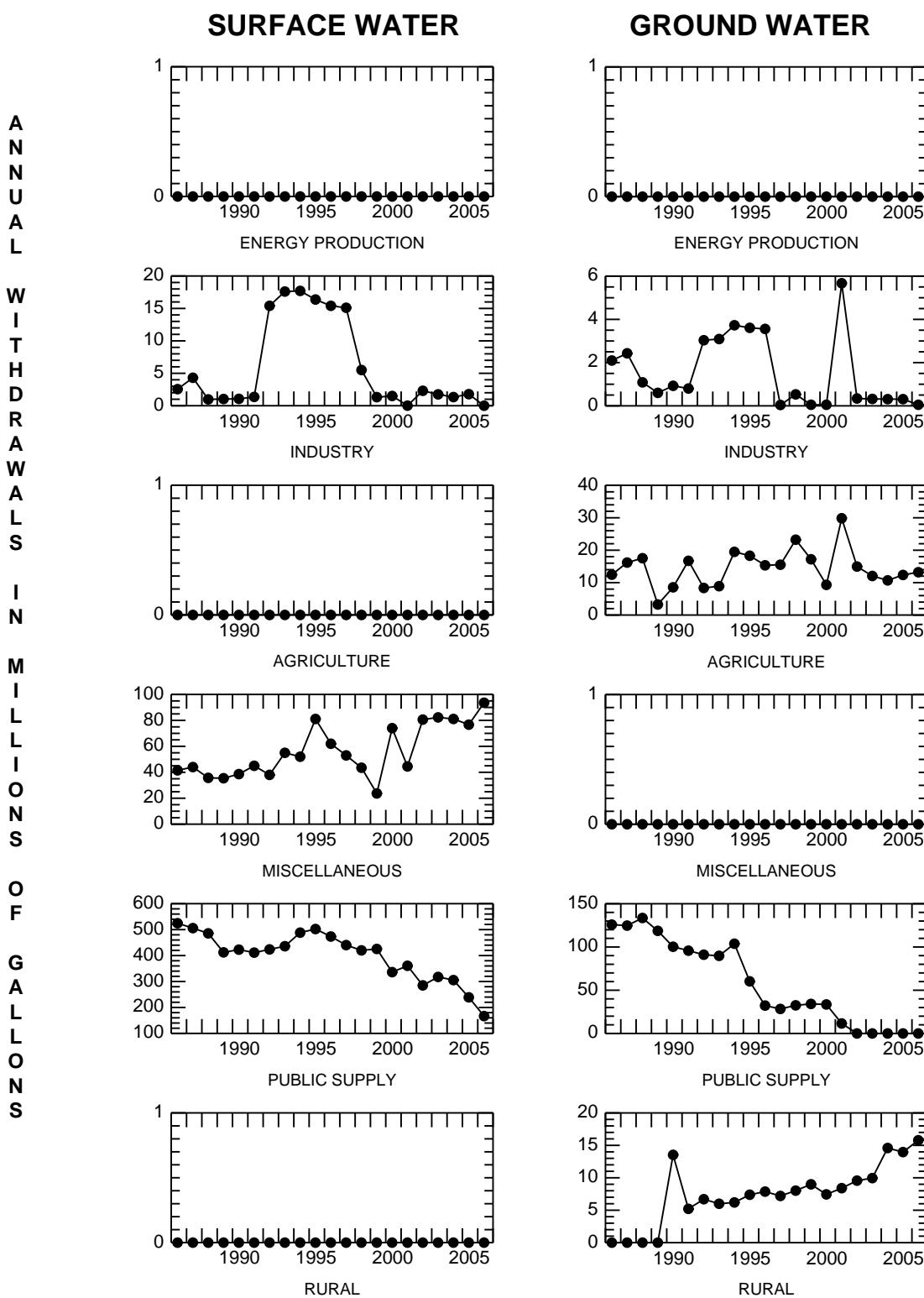
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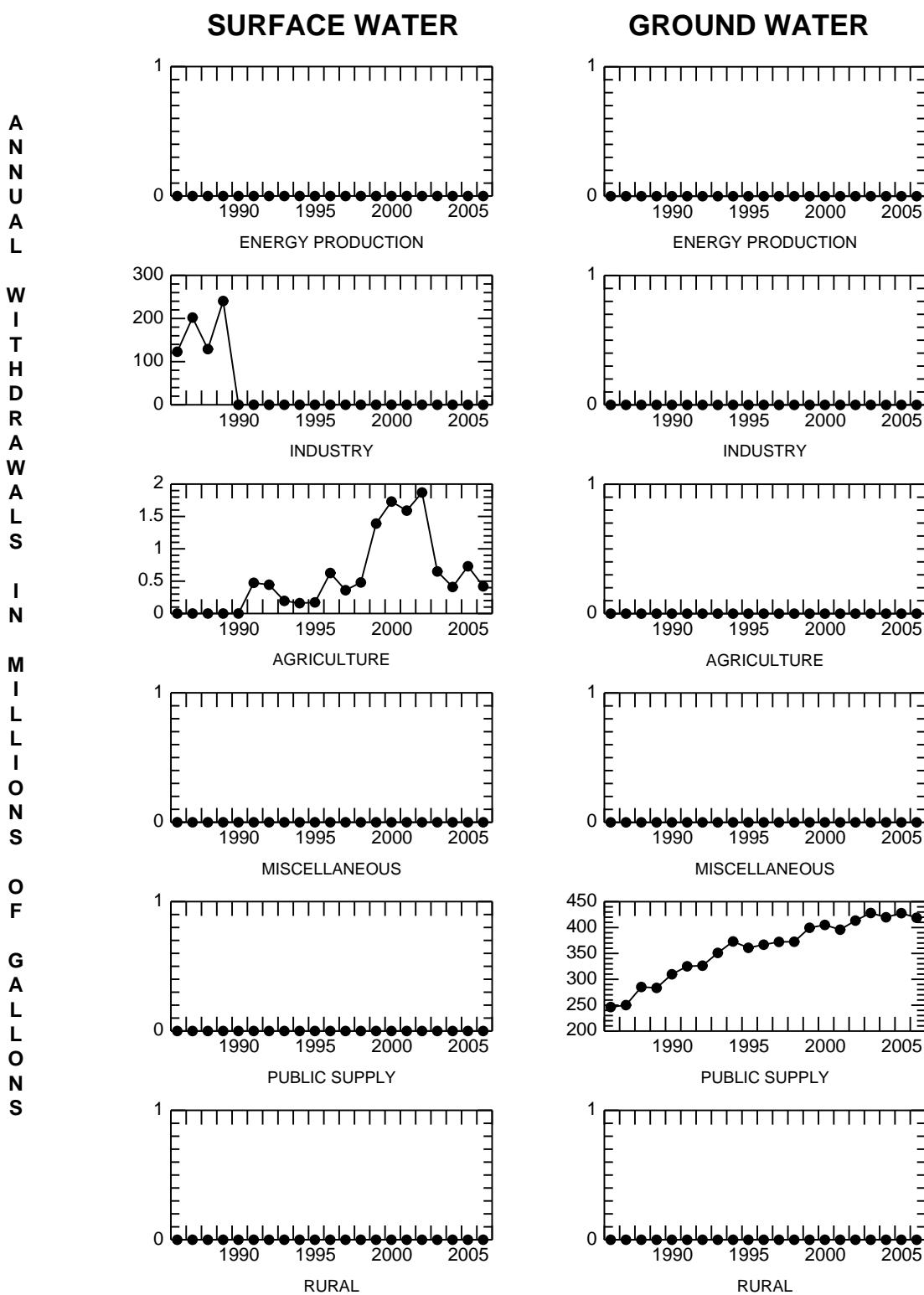
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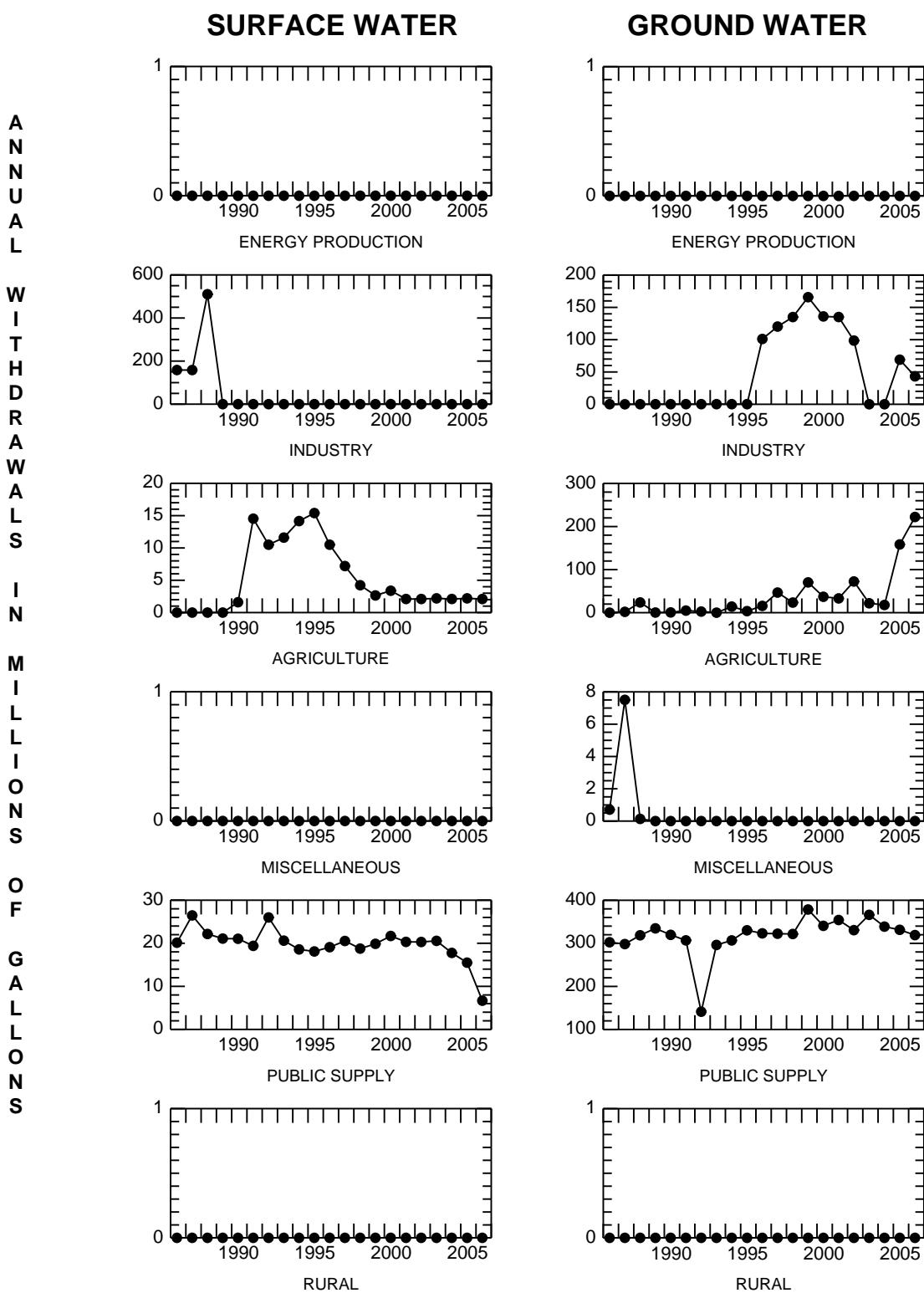
## Orange County Reported Withdrawals, 1986-2006



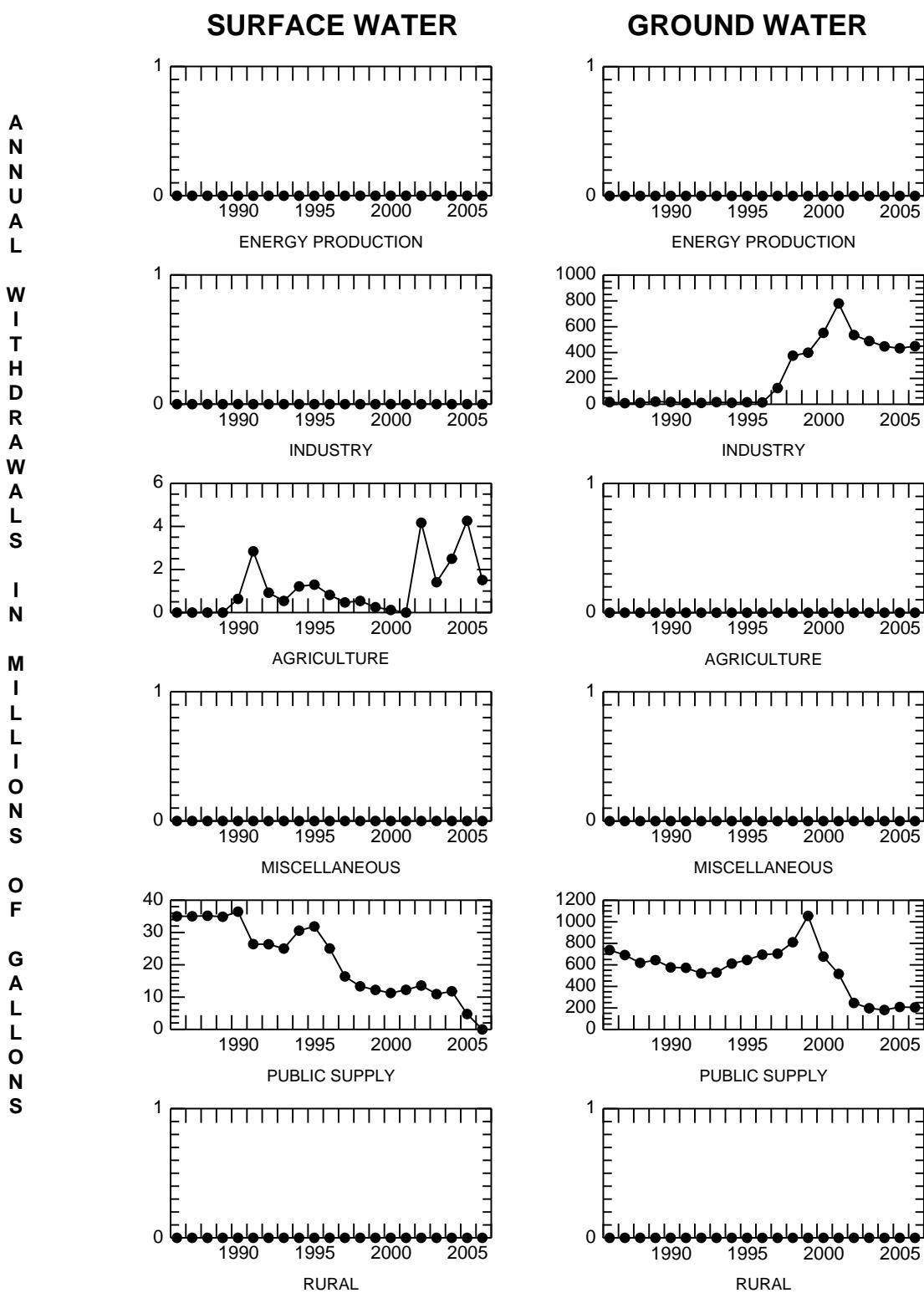
## Owen County Reported Withdrawals, 1986-2006



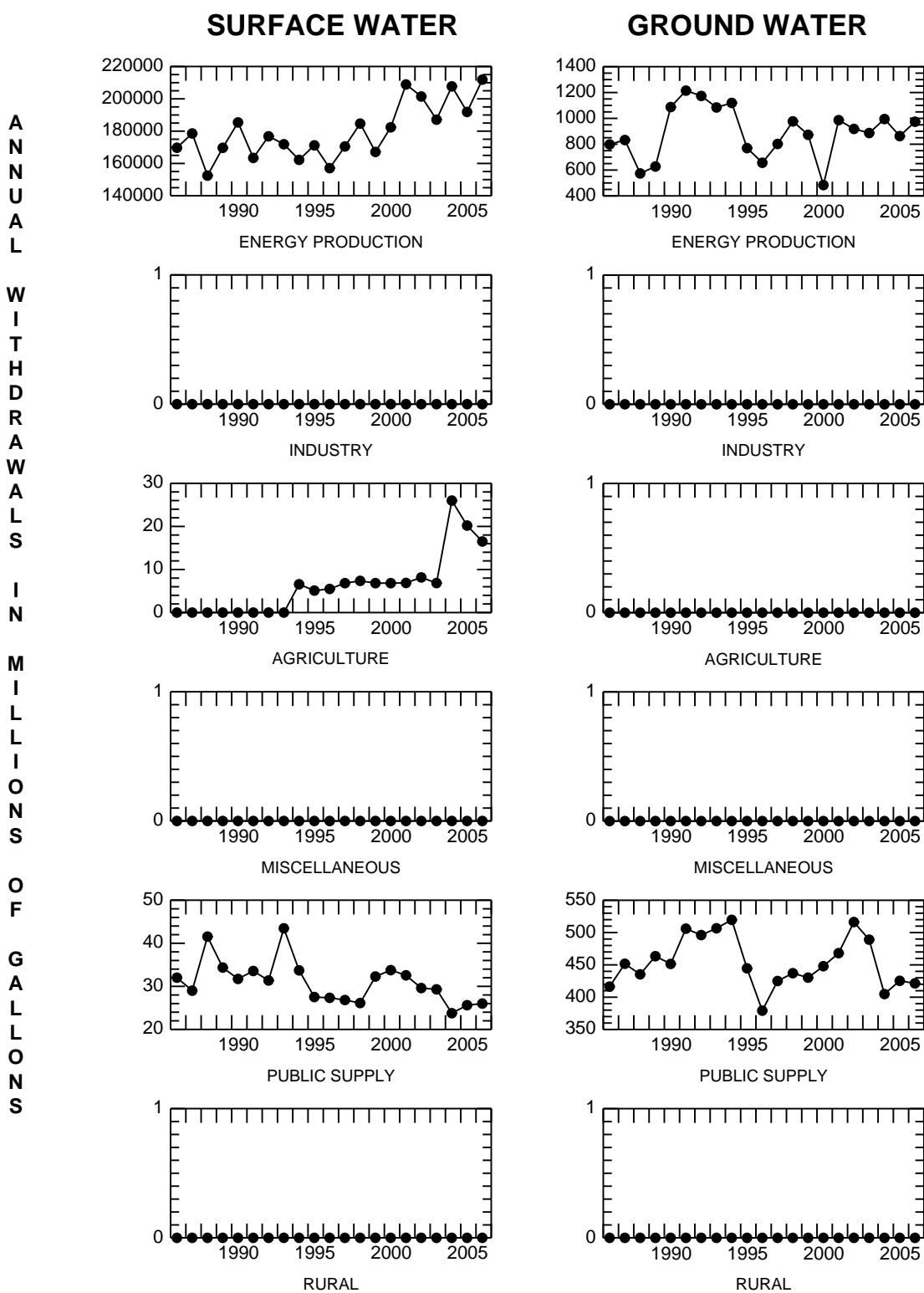
## Parke County Reported Withdrawals, 1986-2006



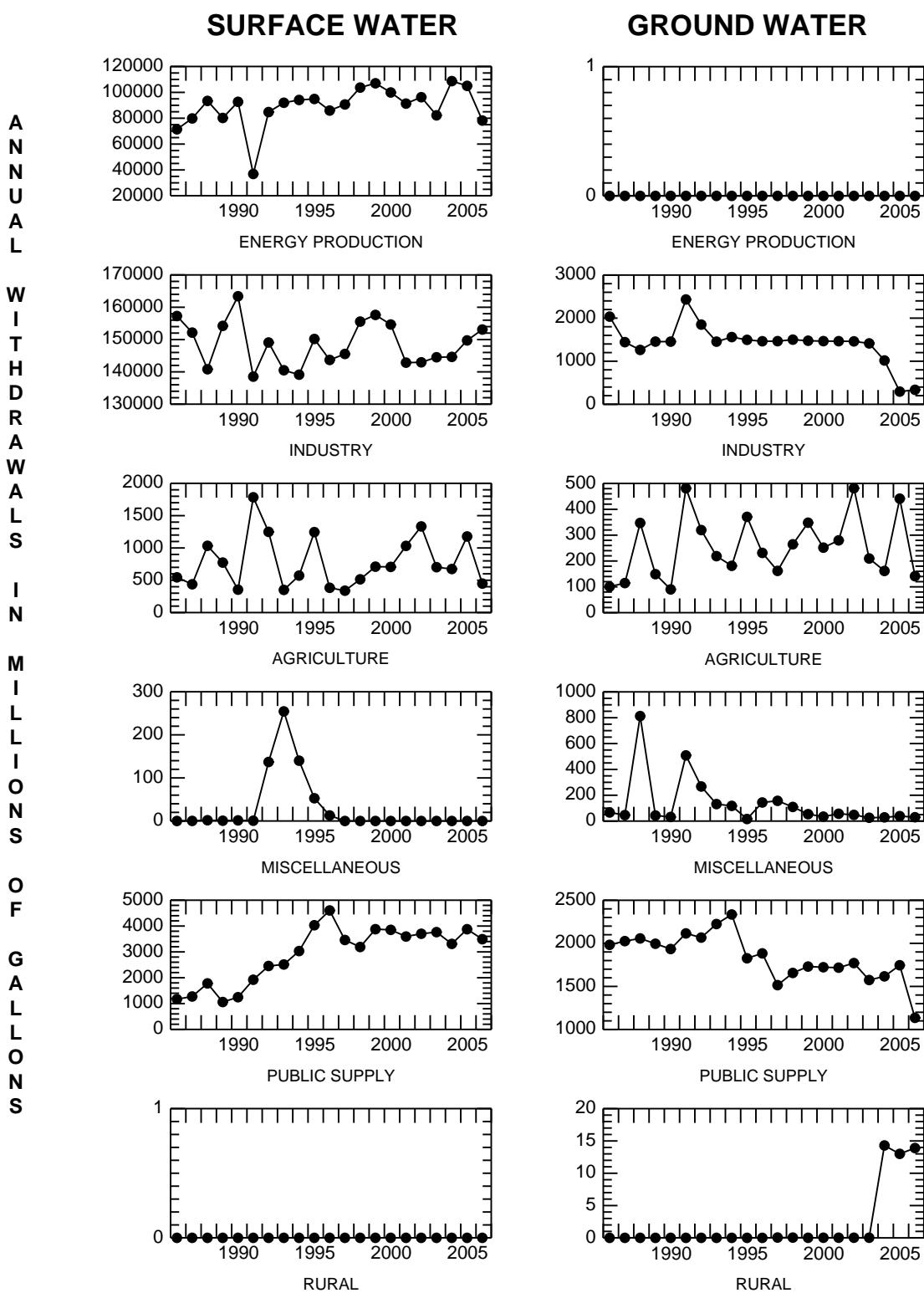
## Perry County Reported Withdrawals, 1986-2006



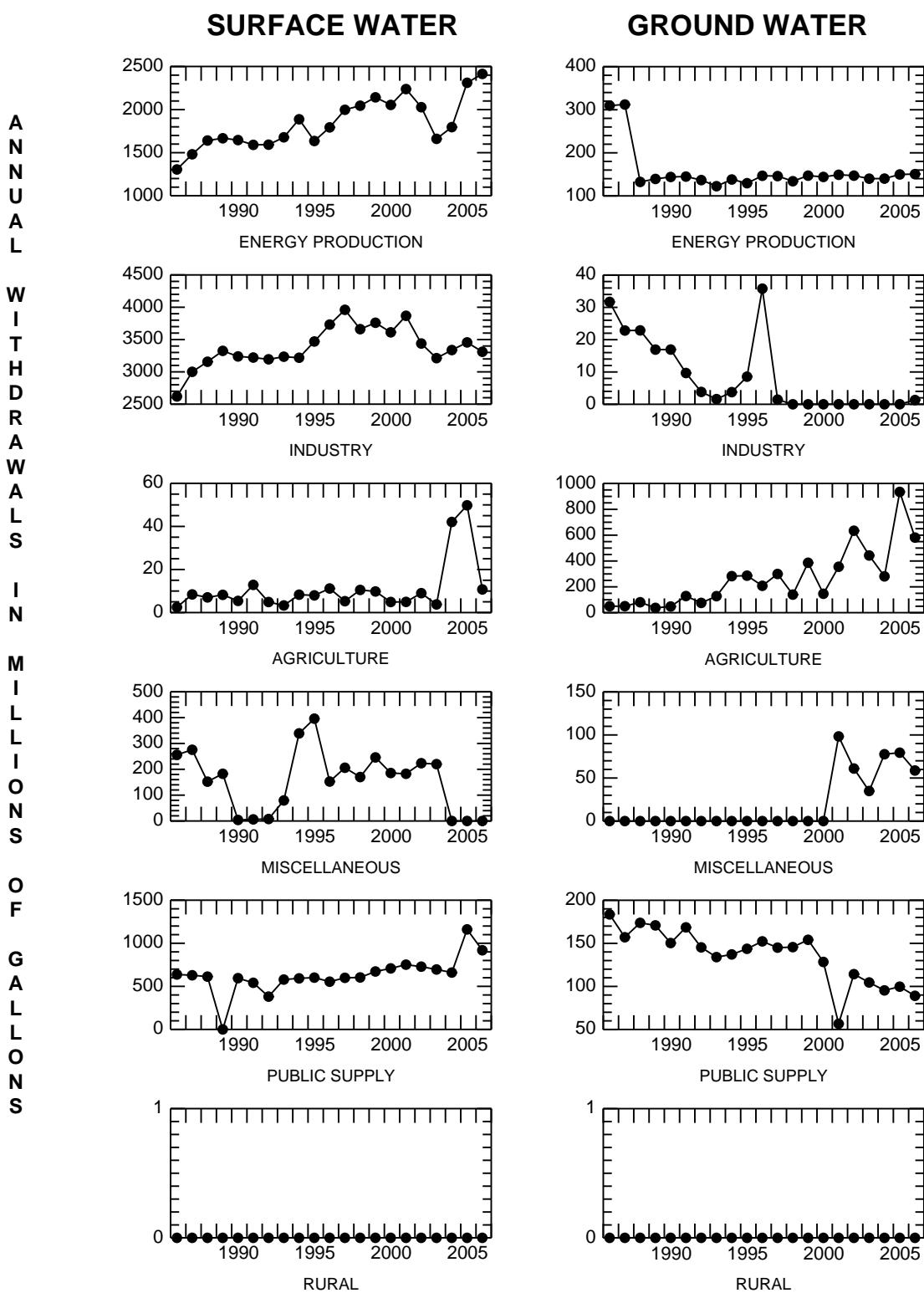
## Pike County Reported Withdrawals, 1986-2006



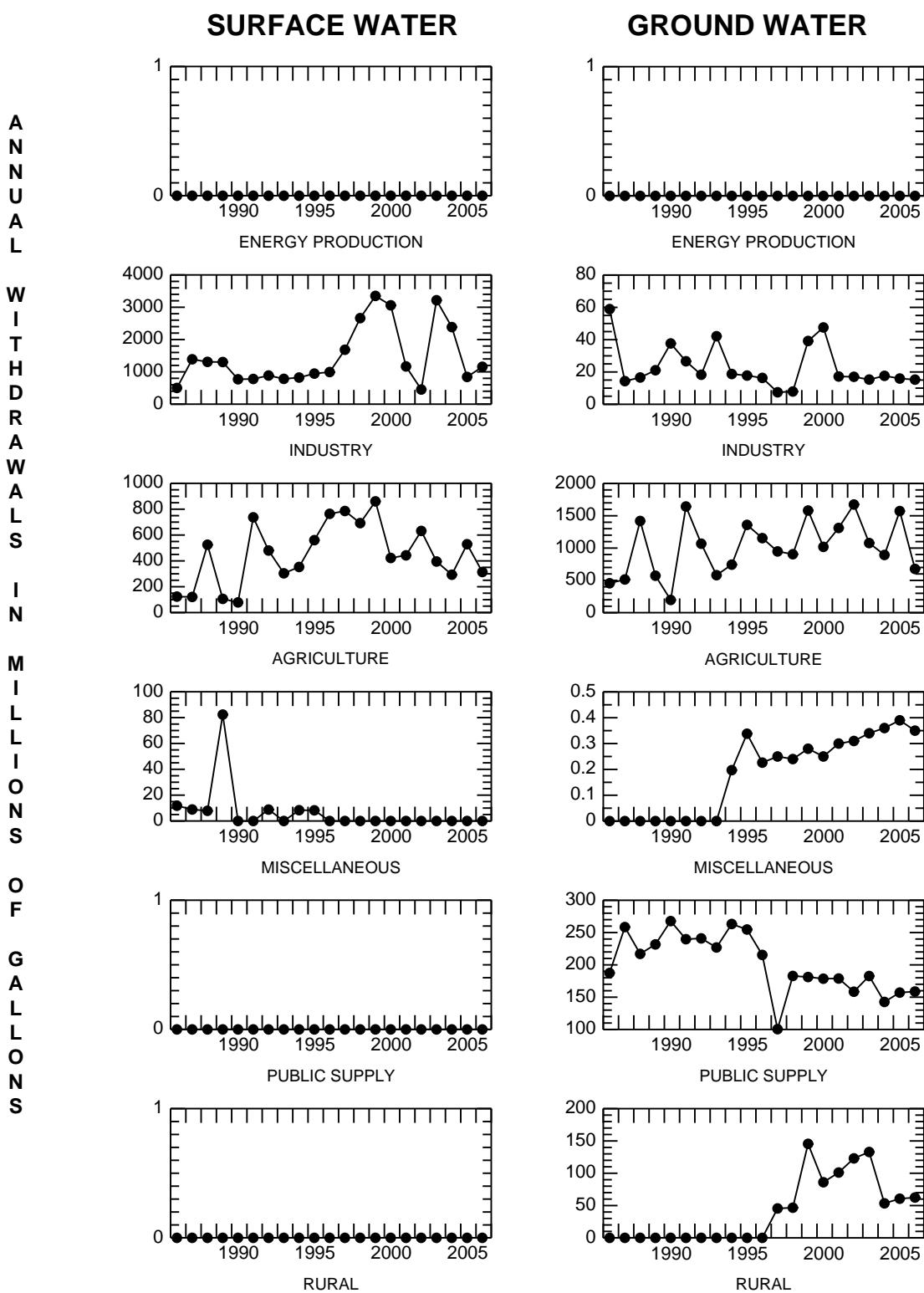
## Porter County Reported Withdrawals, 1986-2006



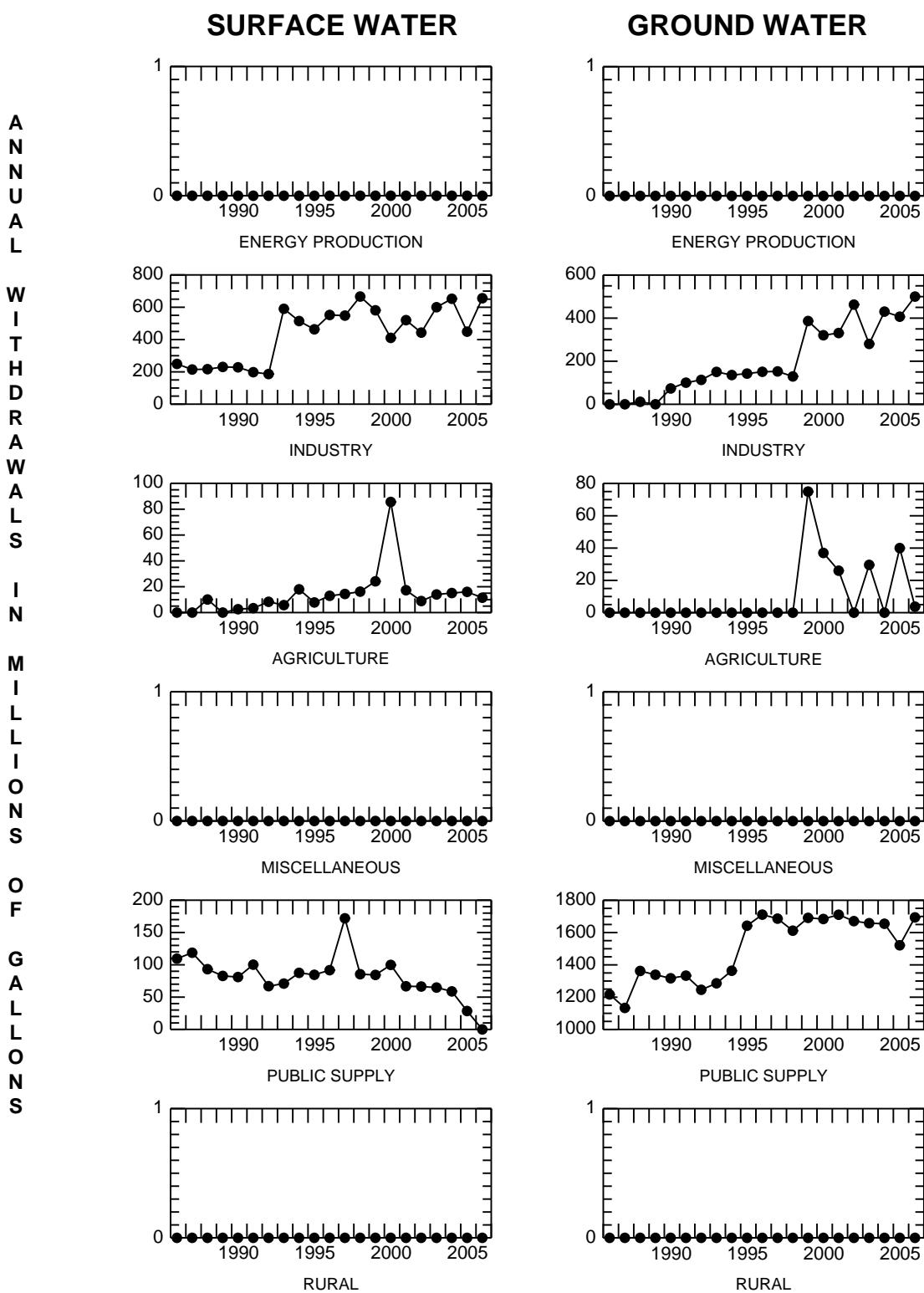
## Posey County Reported Withdrawals, 1986-2006



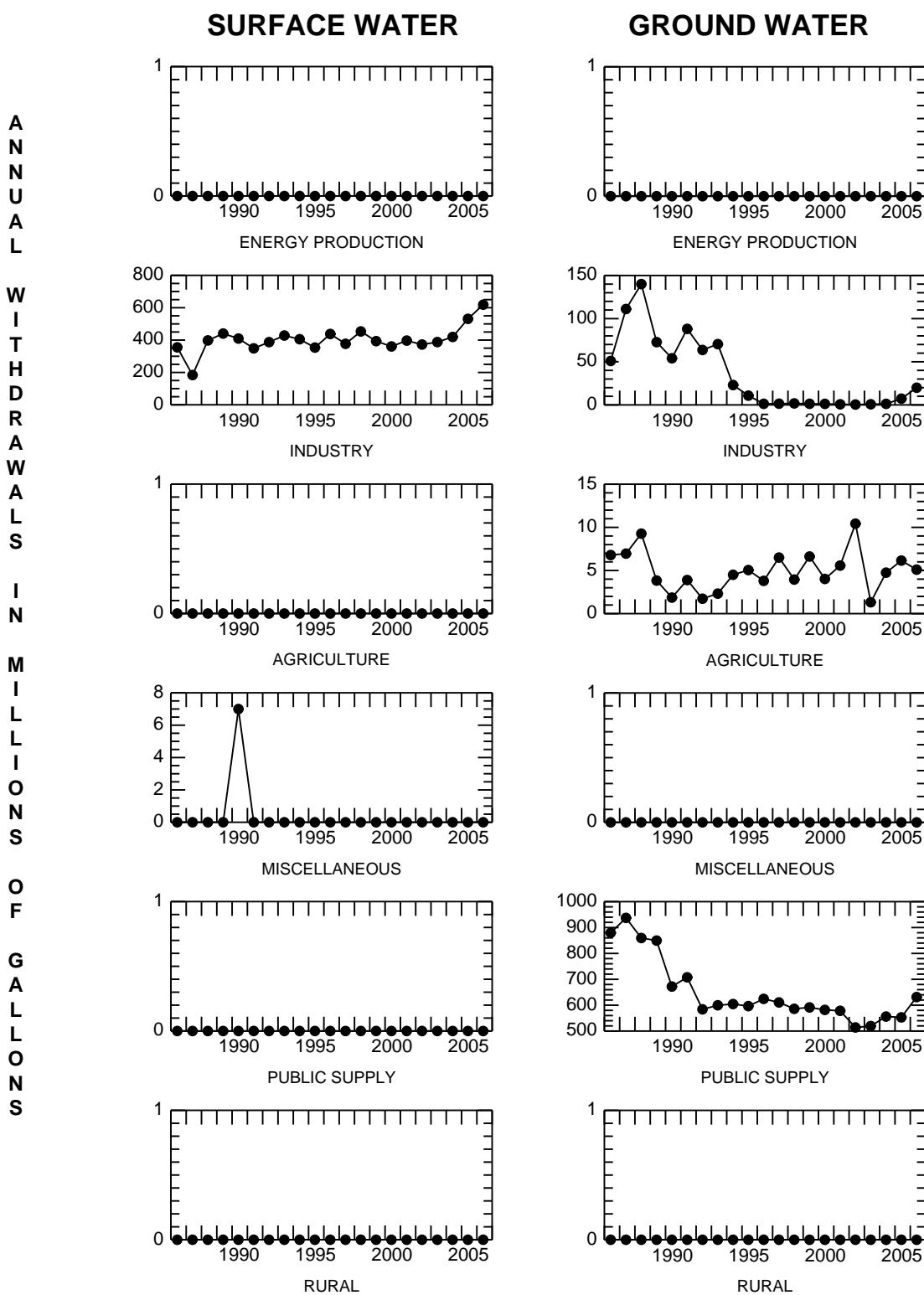
## Pulaski County Reported Withdrawals, 1986-2006



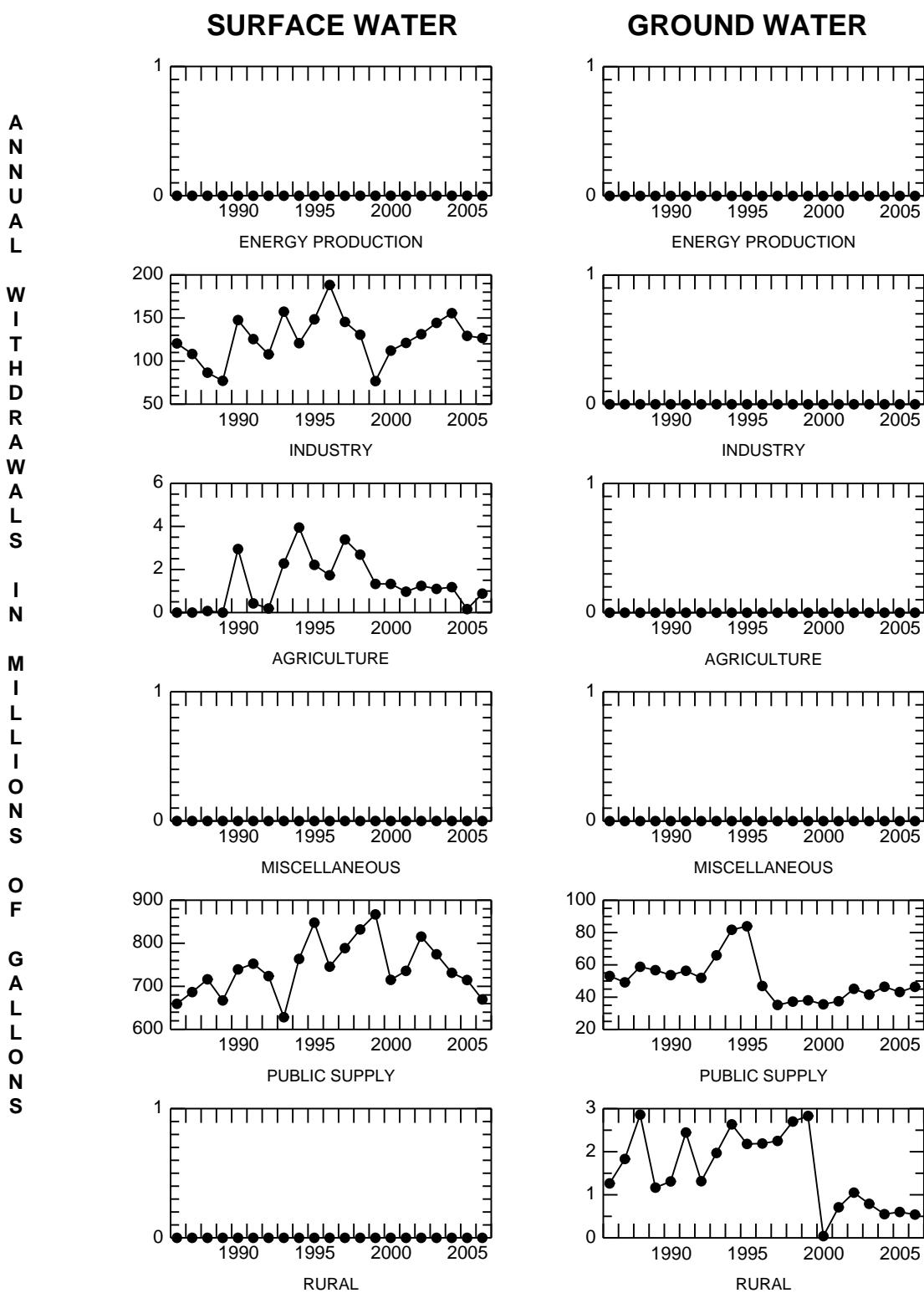
## Putnam County Reported Withdrawals, 1986-2006



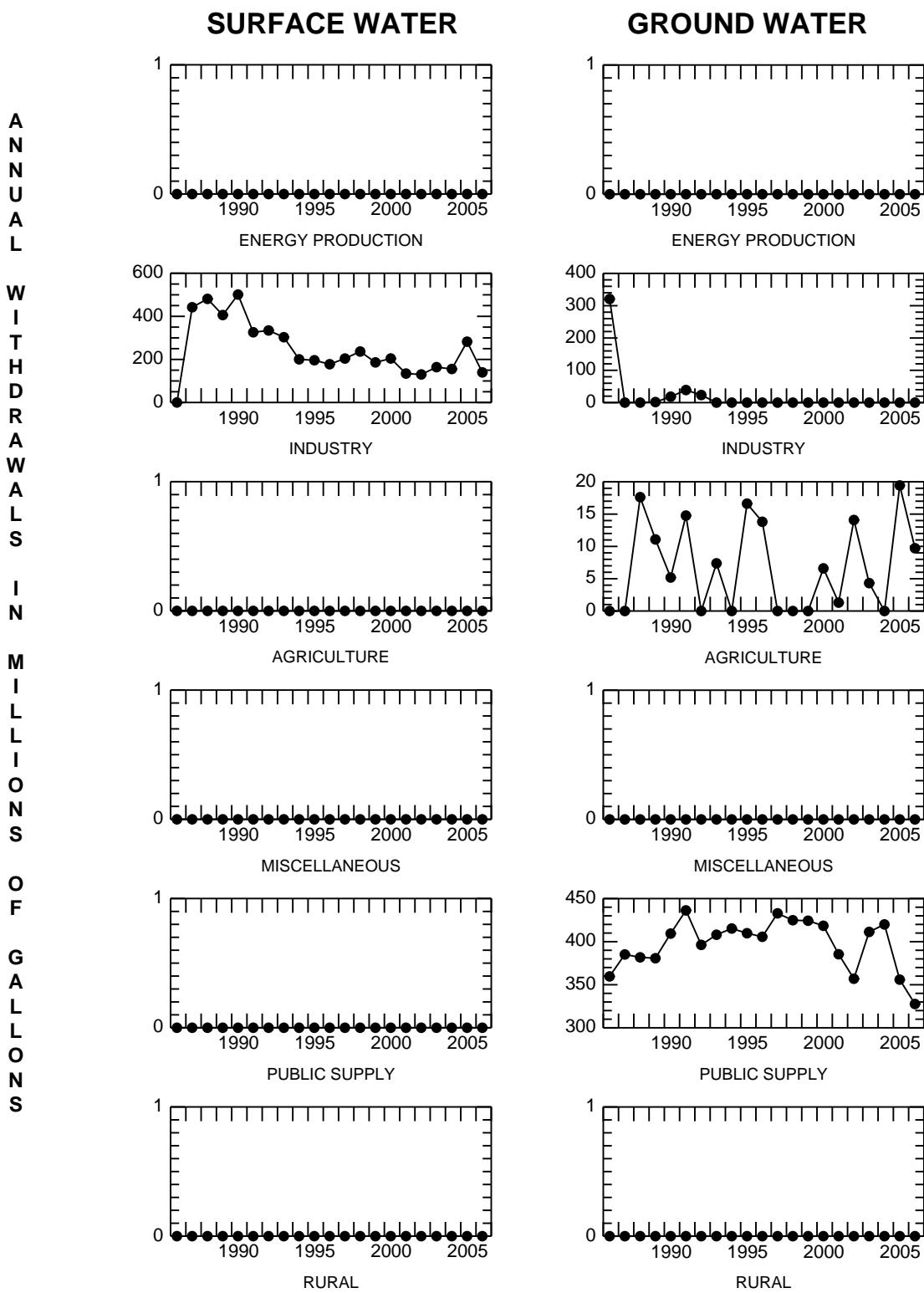
## Randolph County Reported Withdrawals, 1986-2006



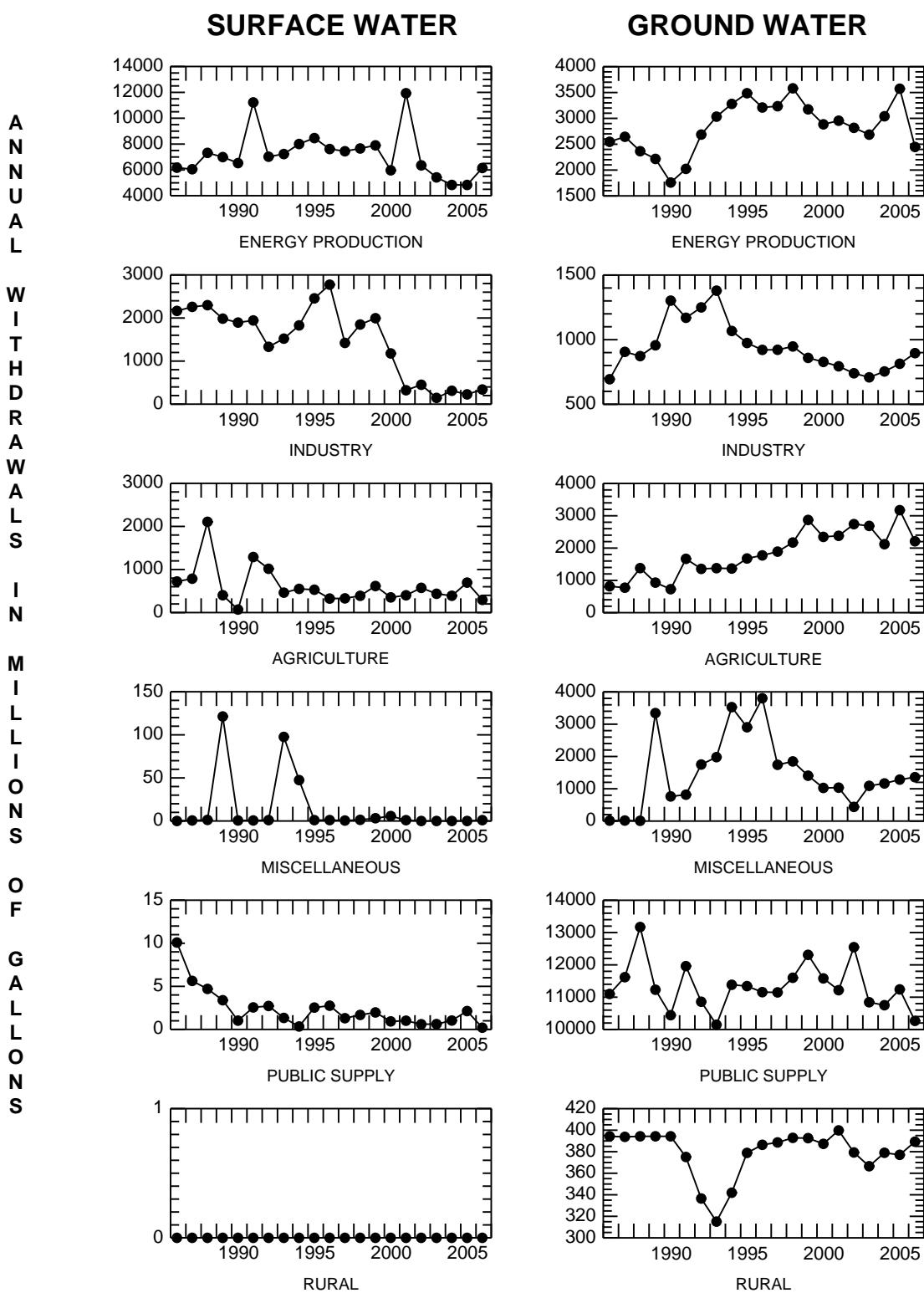
## Ripley County Reported Withdrawals, 1986-2006



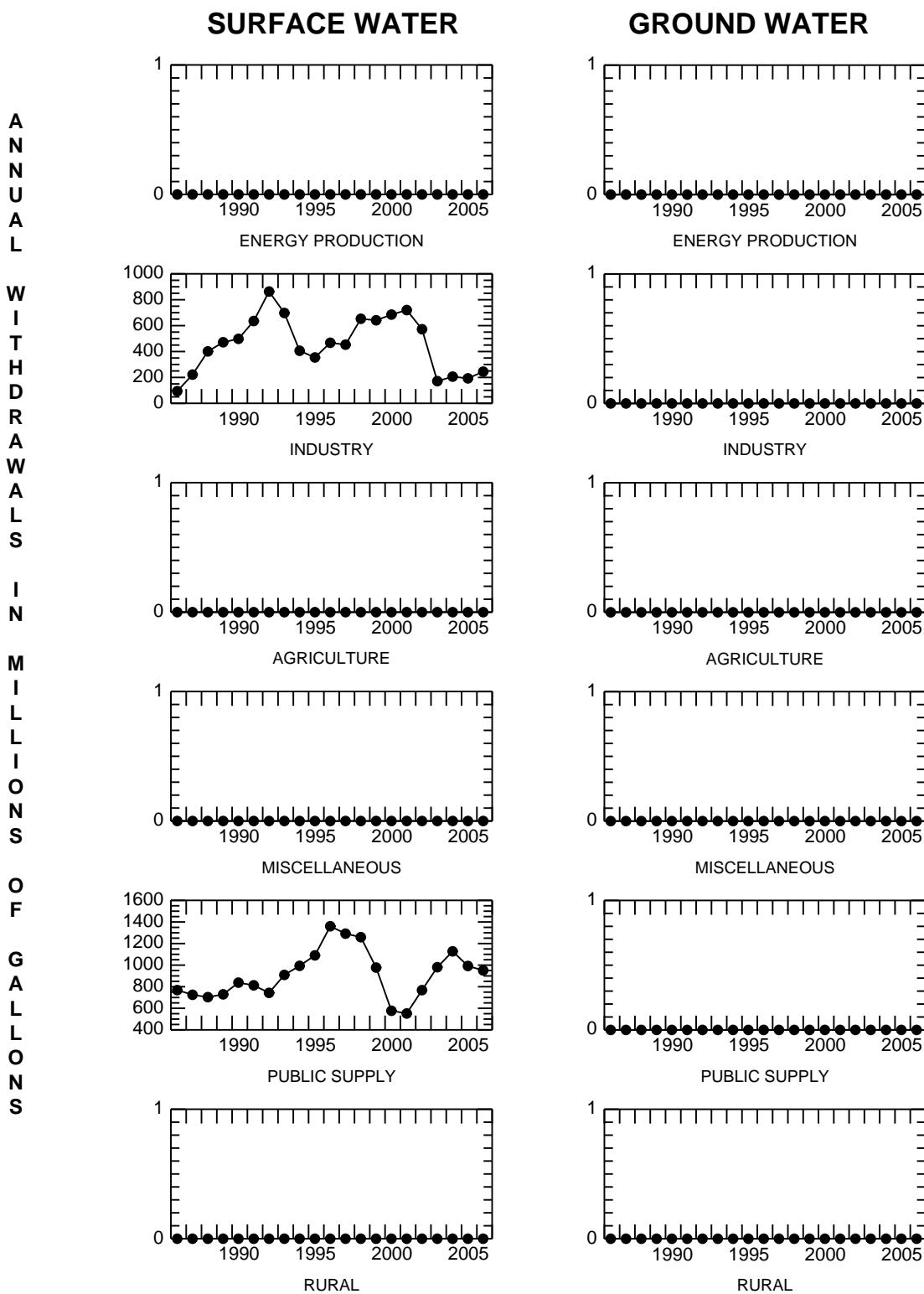
## Rush County Reported Withdrawals, 1986-2006



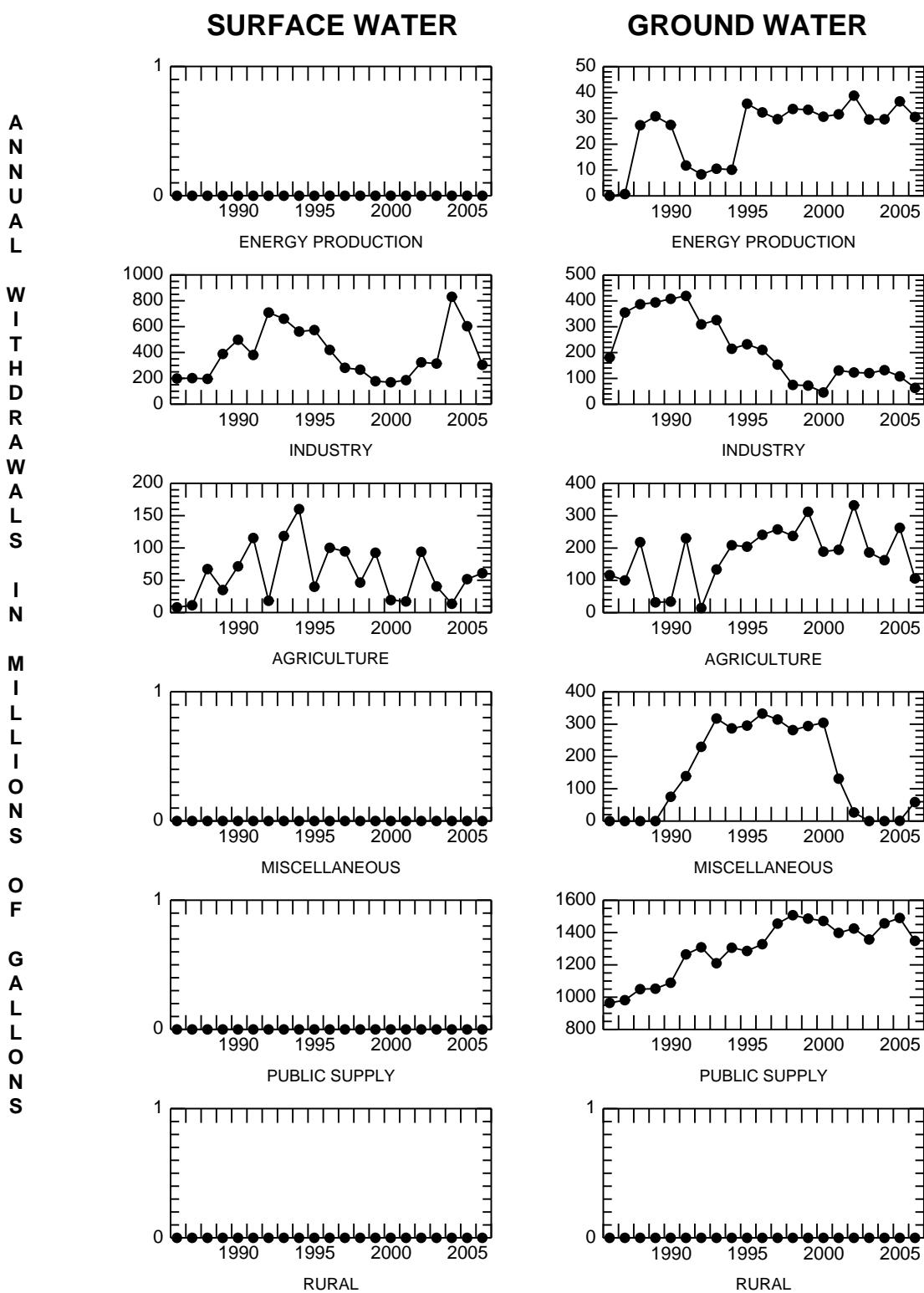
## St. Joseph County Reported Withdrawals, 1986-2006



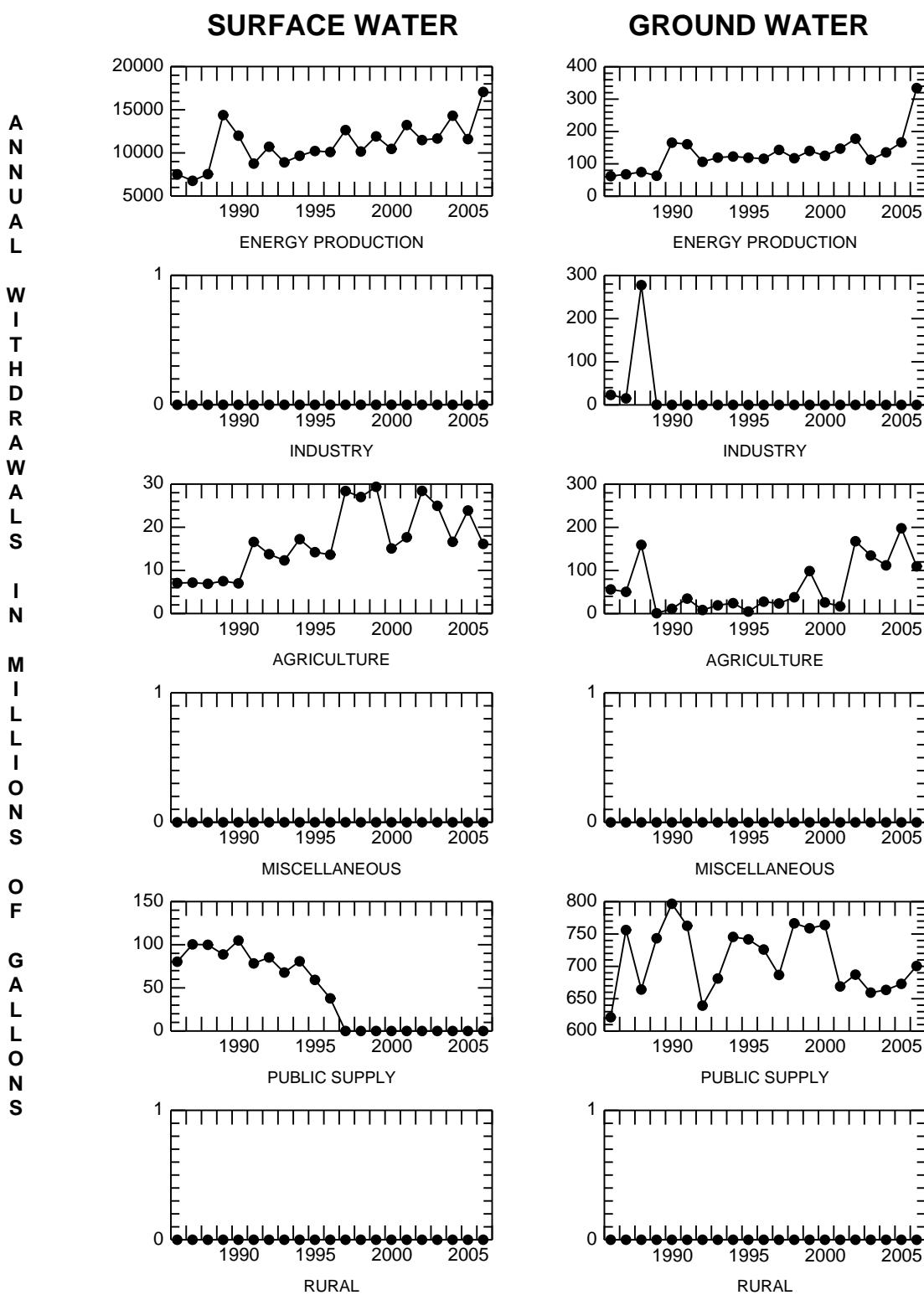
## Scott County Reported Withdrawals, 1986-2006



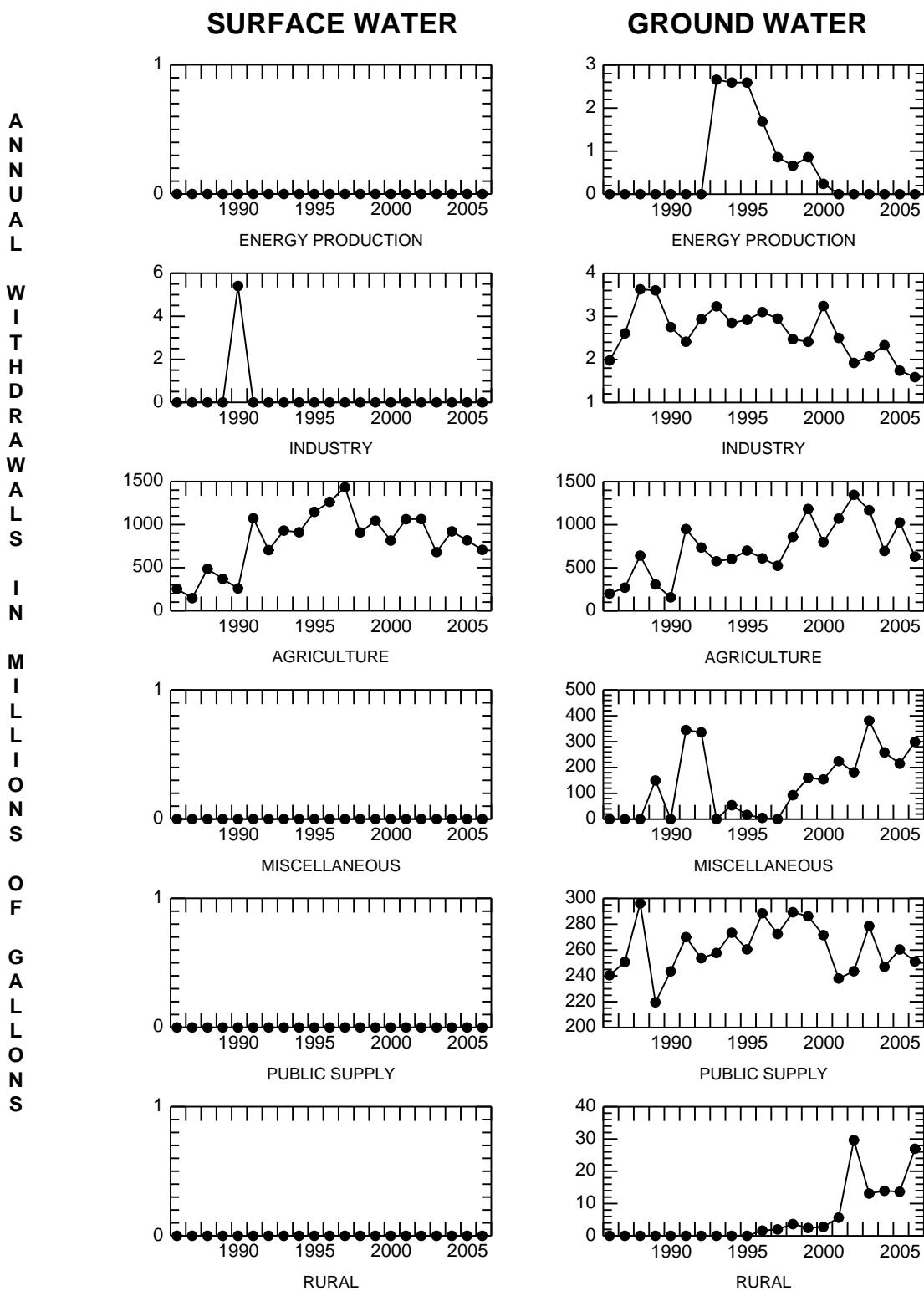
## Shelby County Reported Withdrawals, 1986-2006



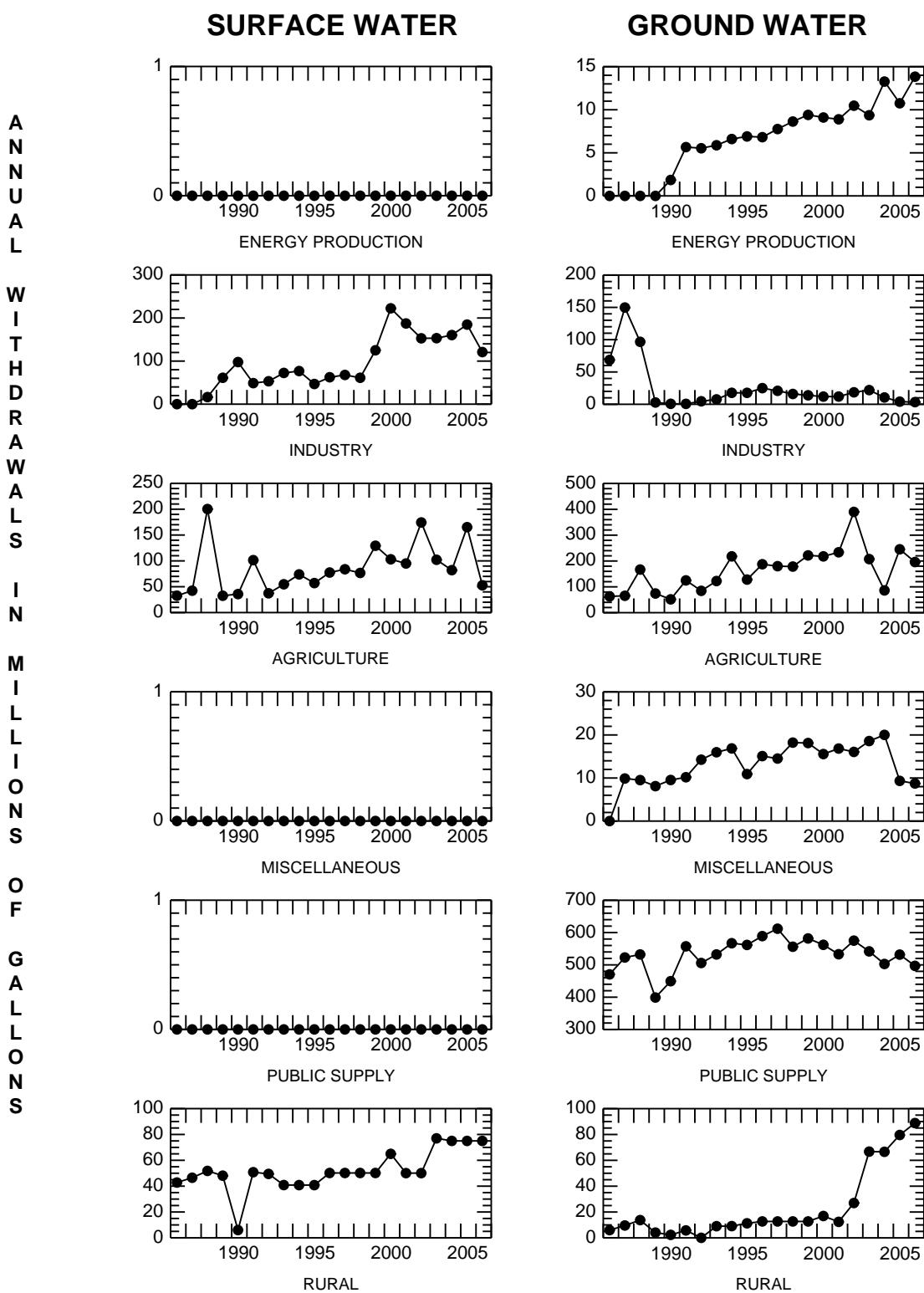
## Spencer County Reported Withdrawals, 1986-2006



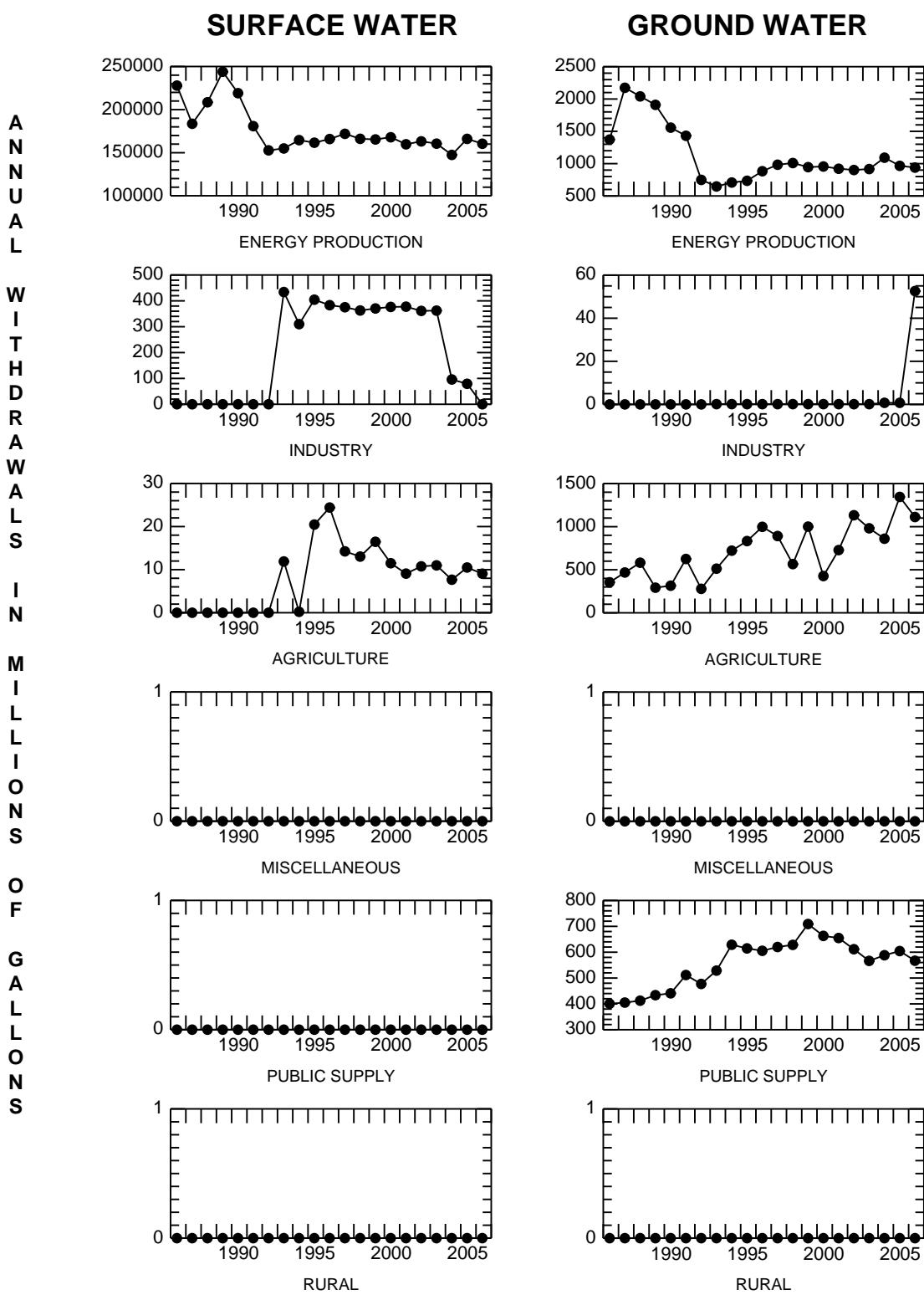
## Starke County Reported Withdrawals, 1986-2006



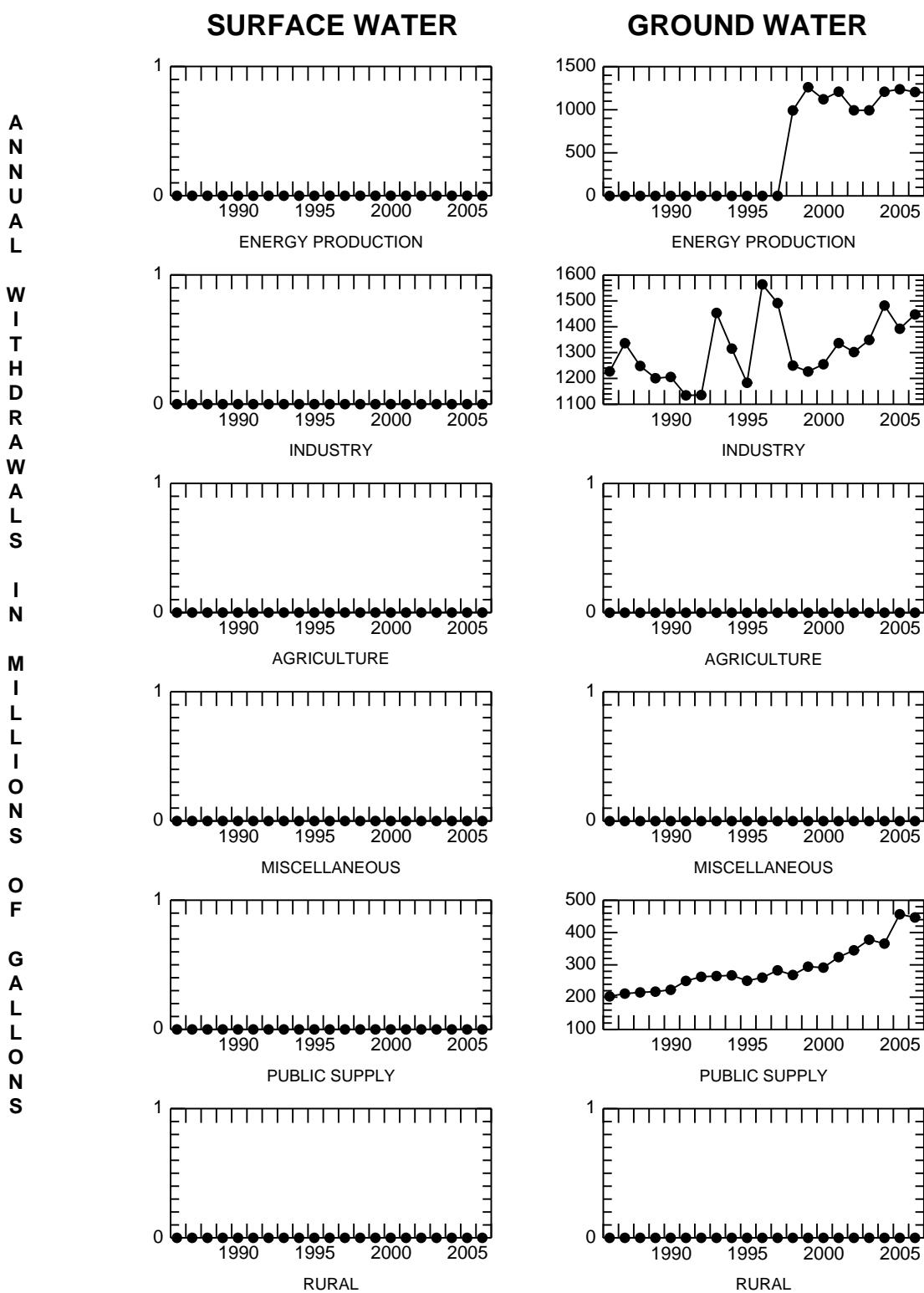
## Steuben County Reported Withdrawals, 1986-2006



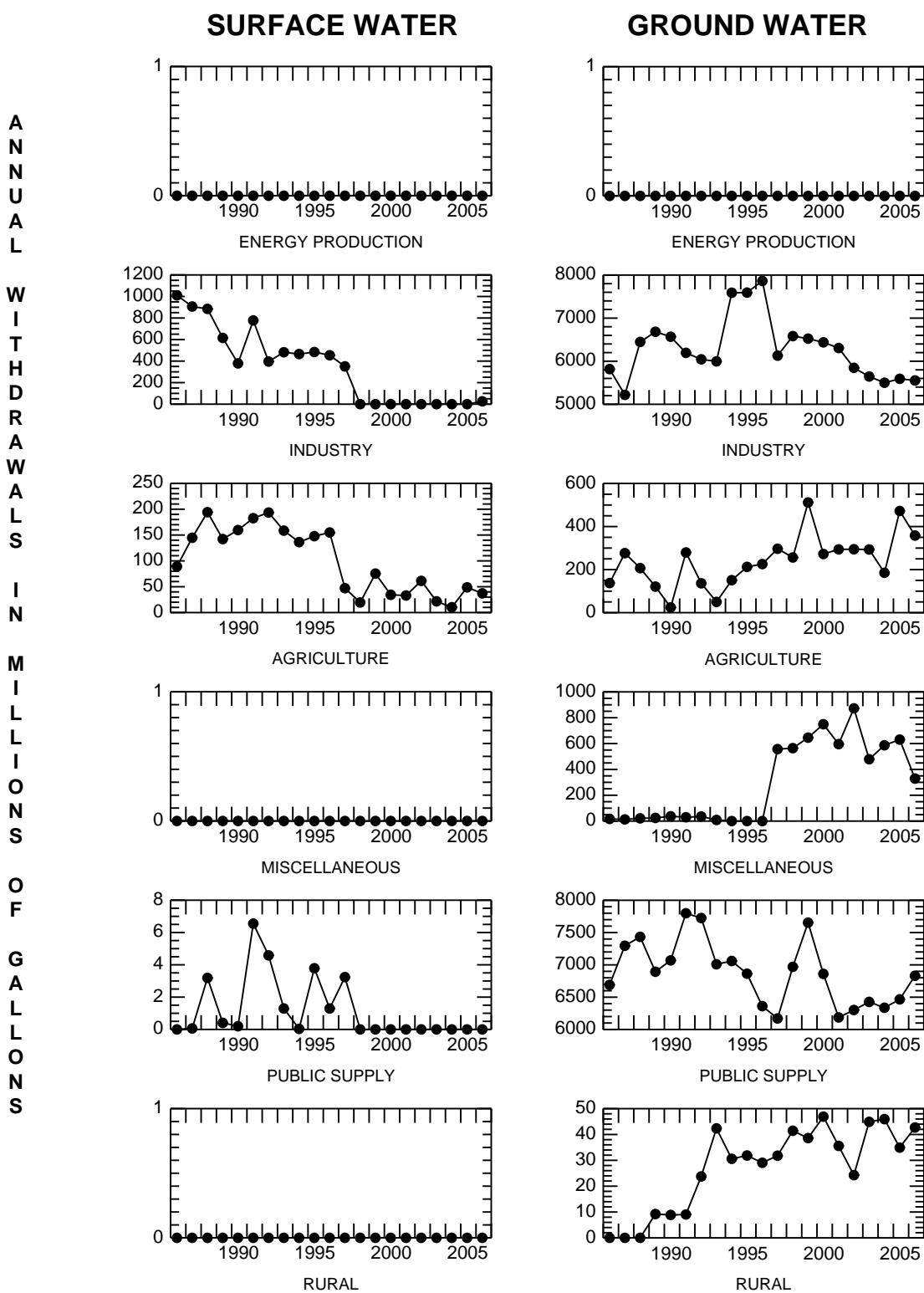
## Sullivan County Reported Withdrawals, 1986-2006



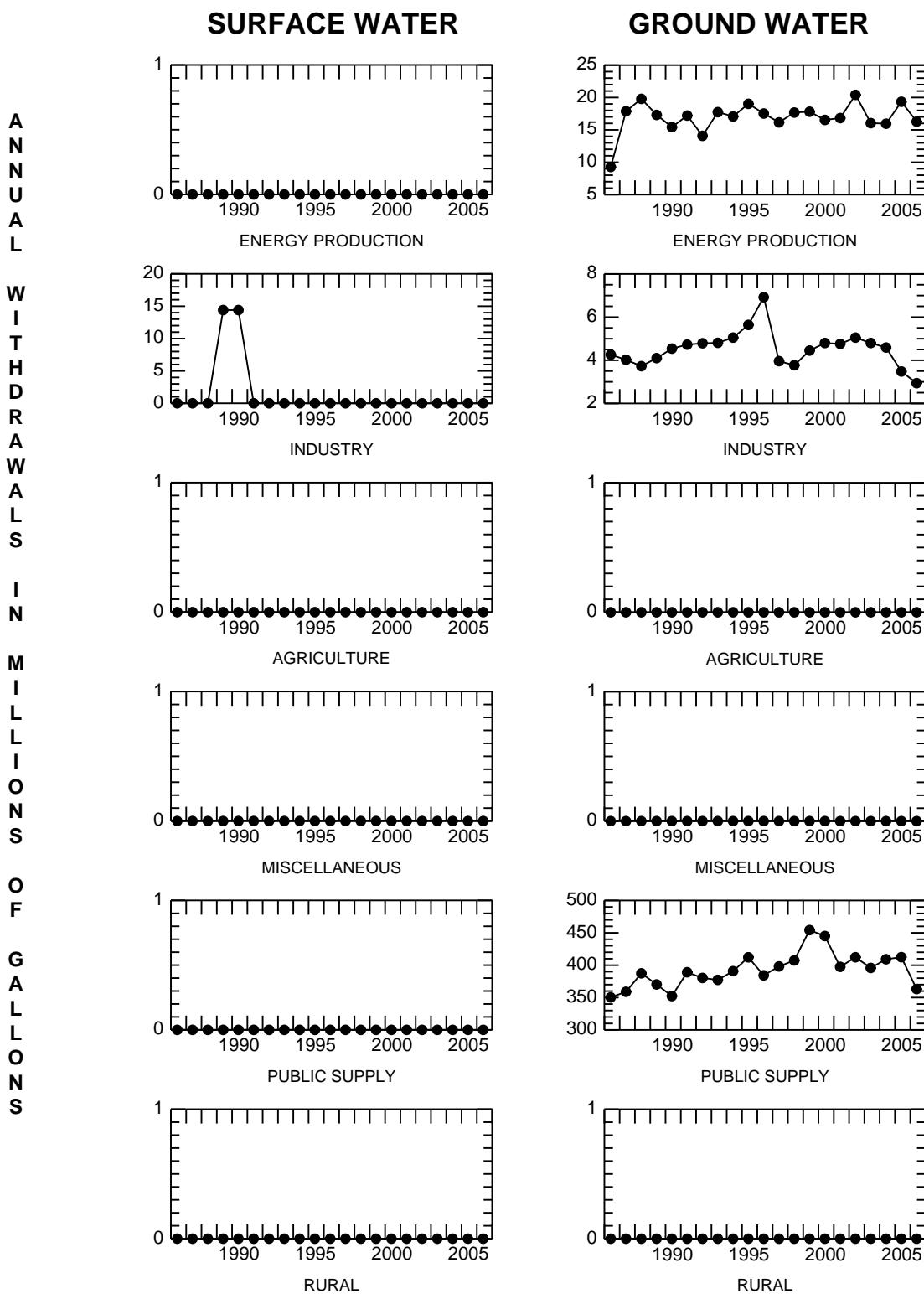
## Switzerland County Reported Withdrawals, 1986-2006



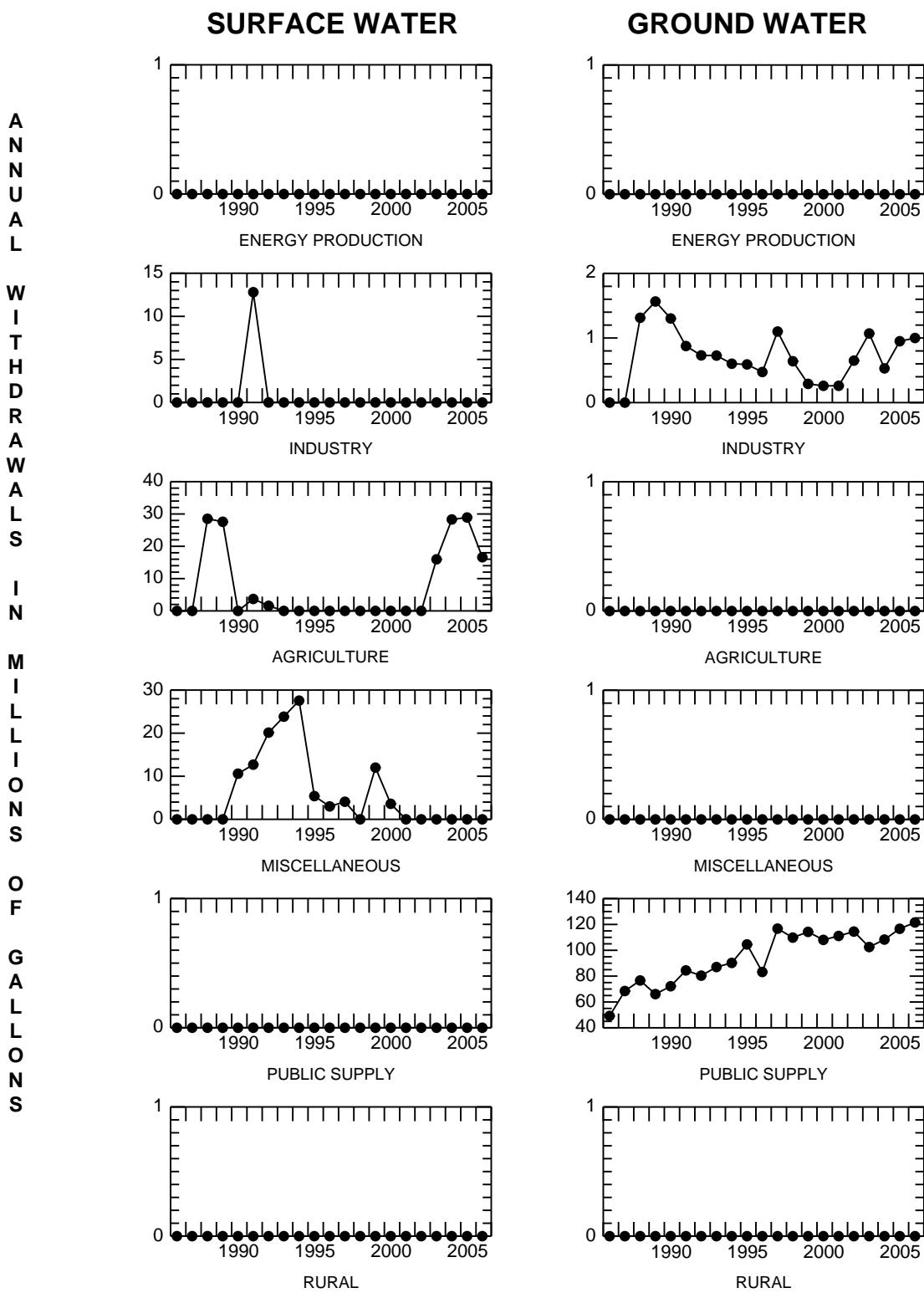
## Tippecanoe County Reported Withdrawals, 1986-2006



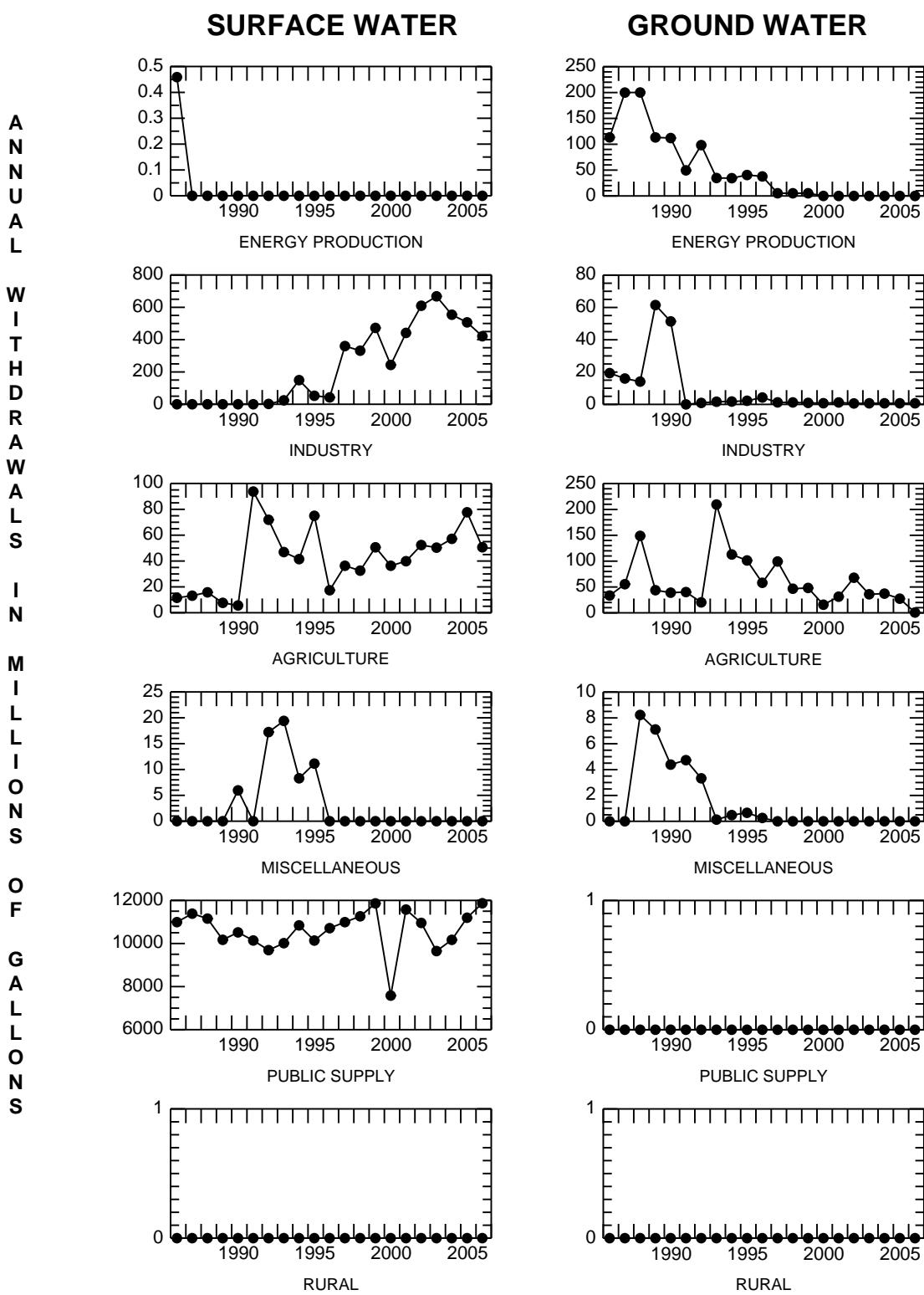
## Tipton County Reported Withdrawals, 1986-2006



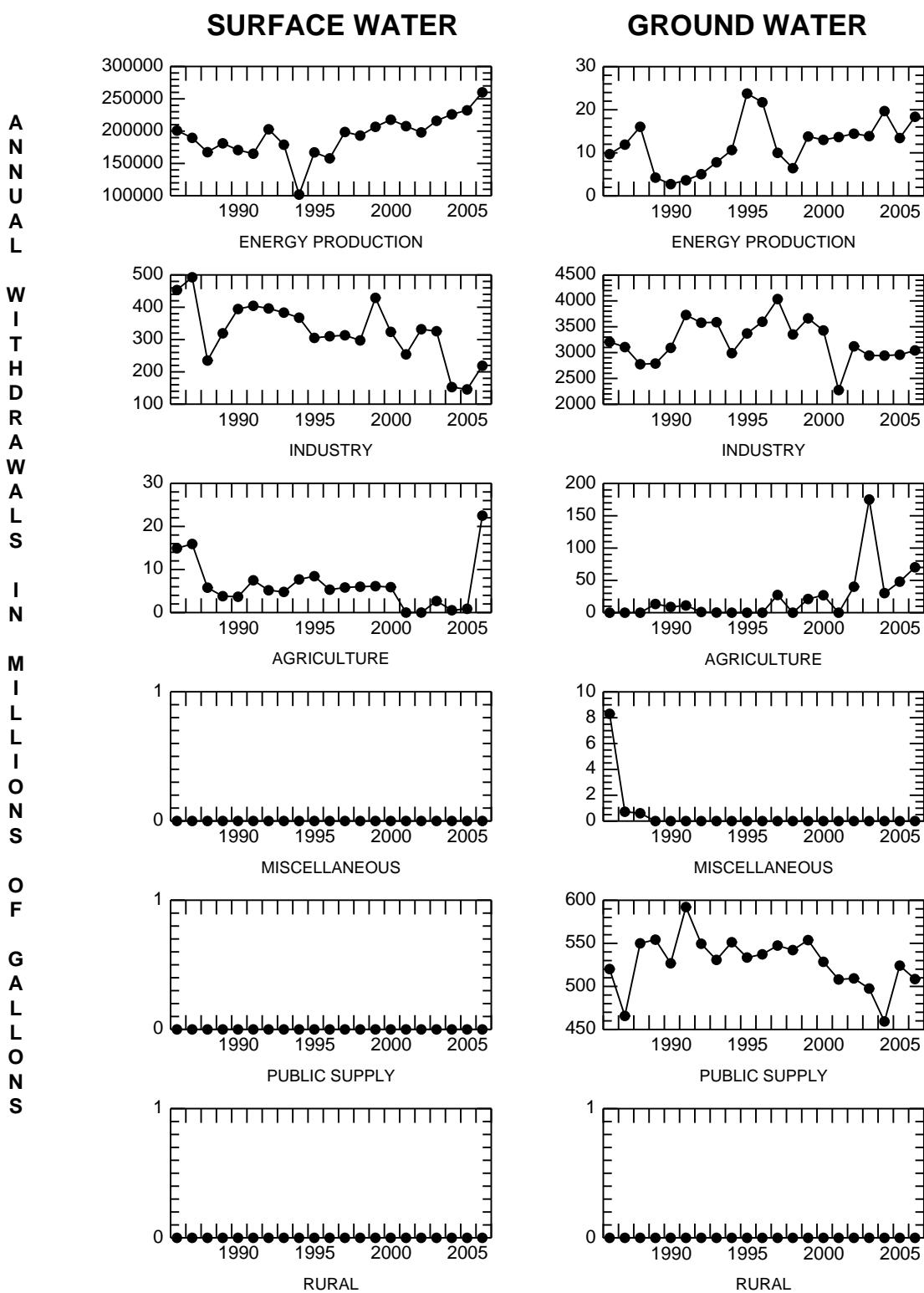
## Union County Reported Withdrawals, 1986-2006



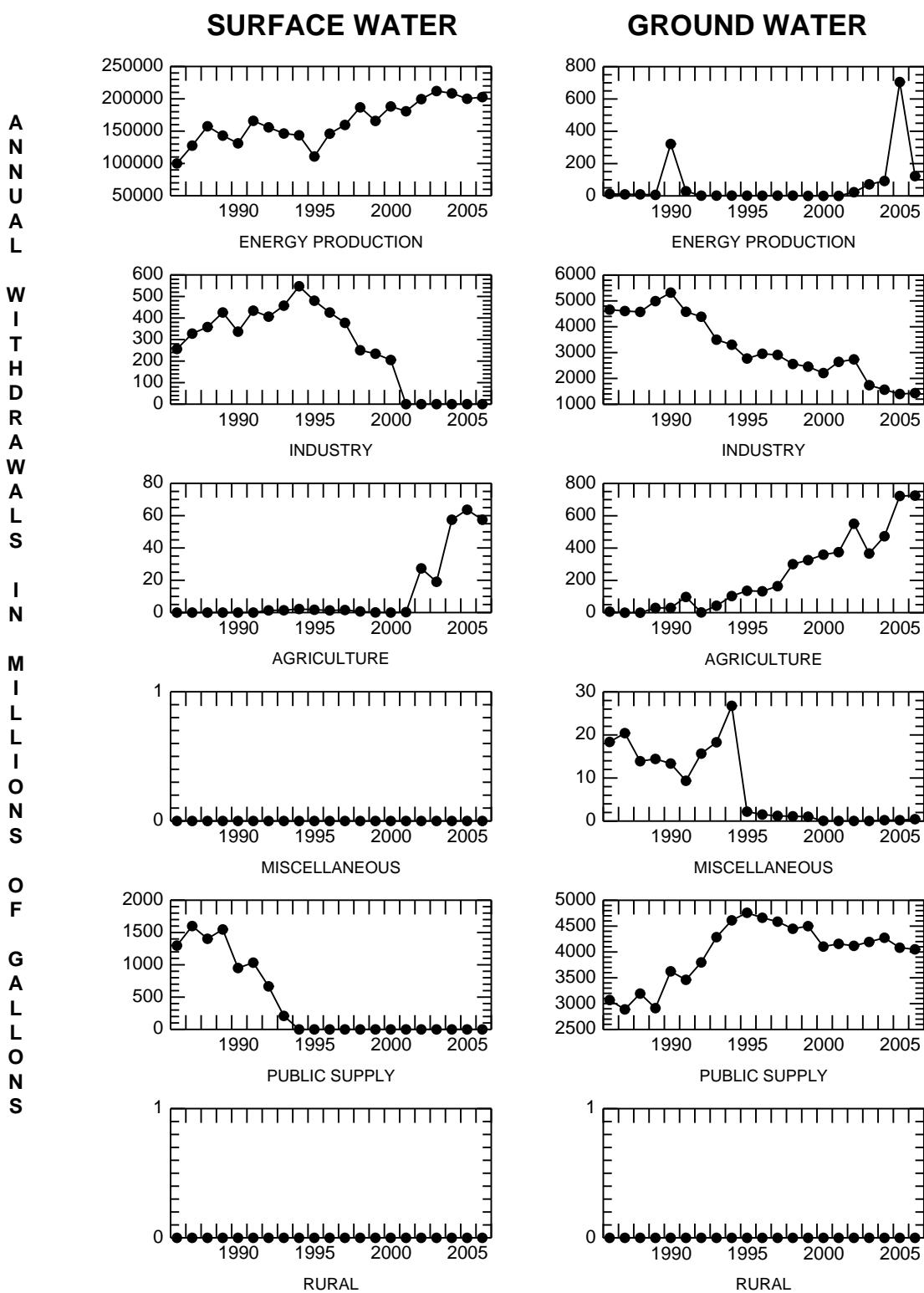
## Vanderburgh County Reported Withdrawals, 1986-2006



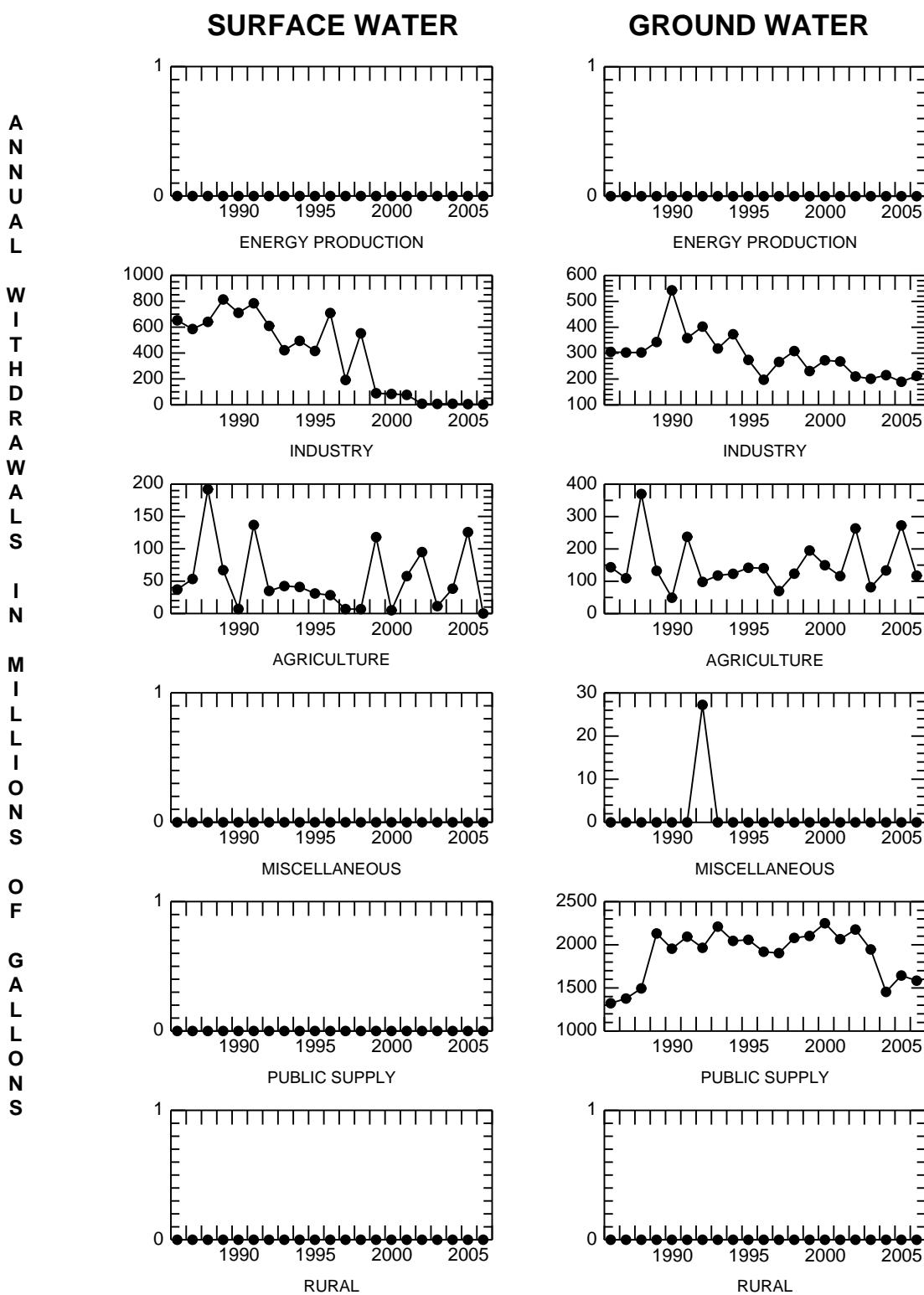
## Vermillion County Reported Withdrawals, 1986-2006



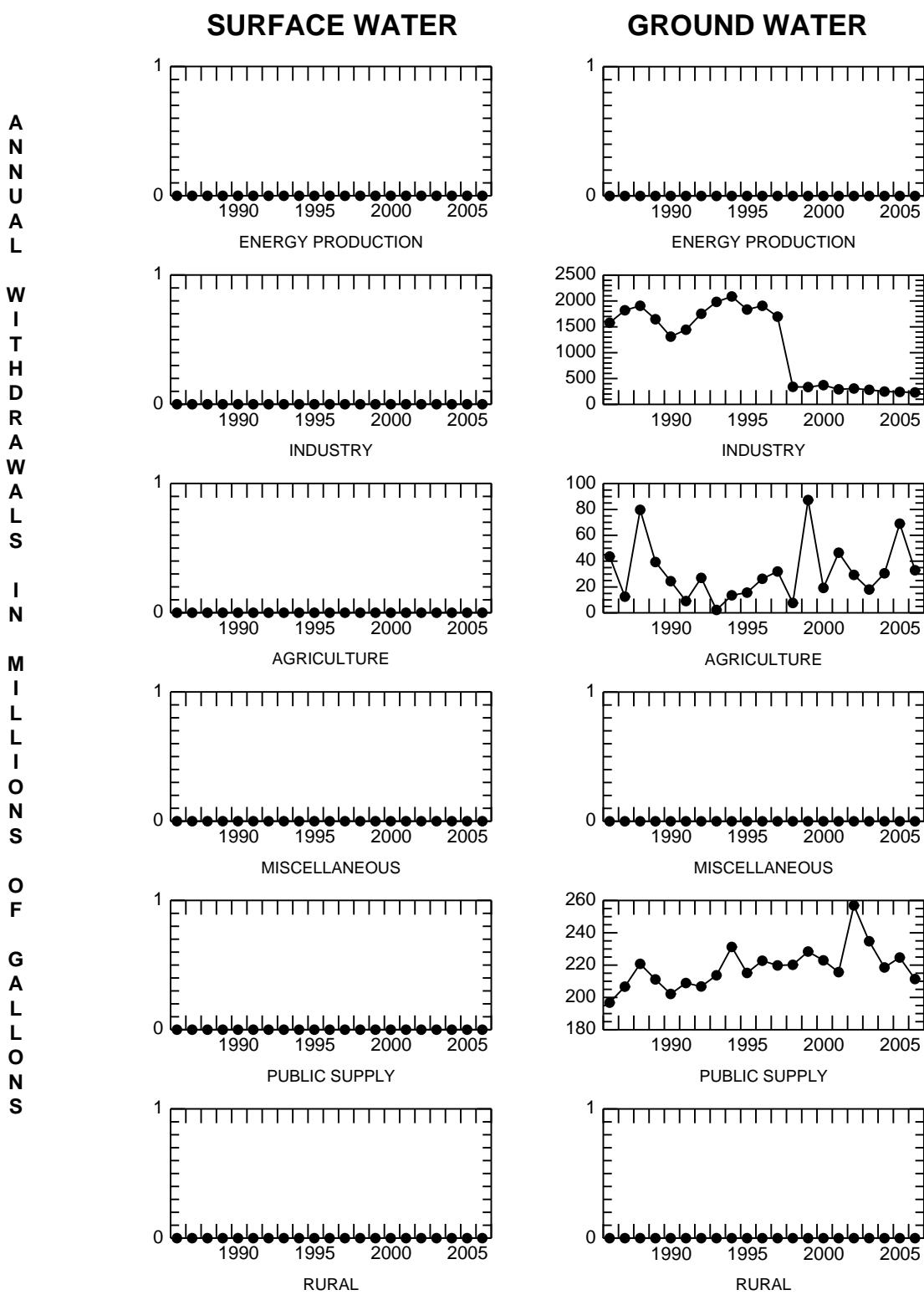
## Vigo County Reported Withdrawals, 1986-2006



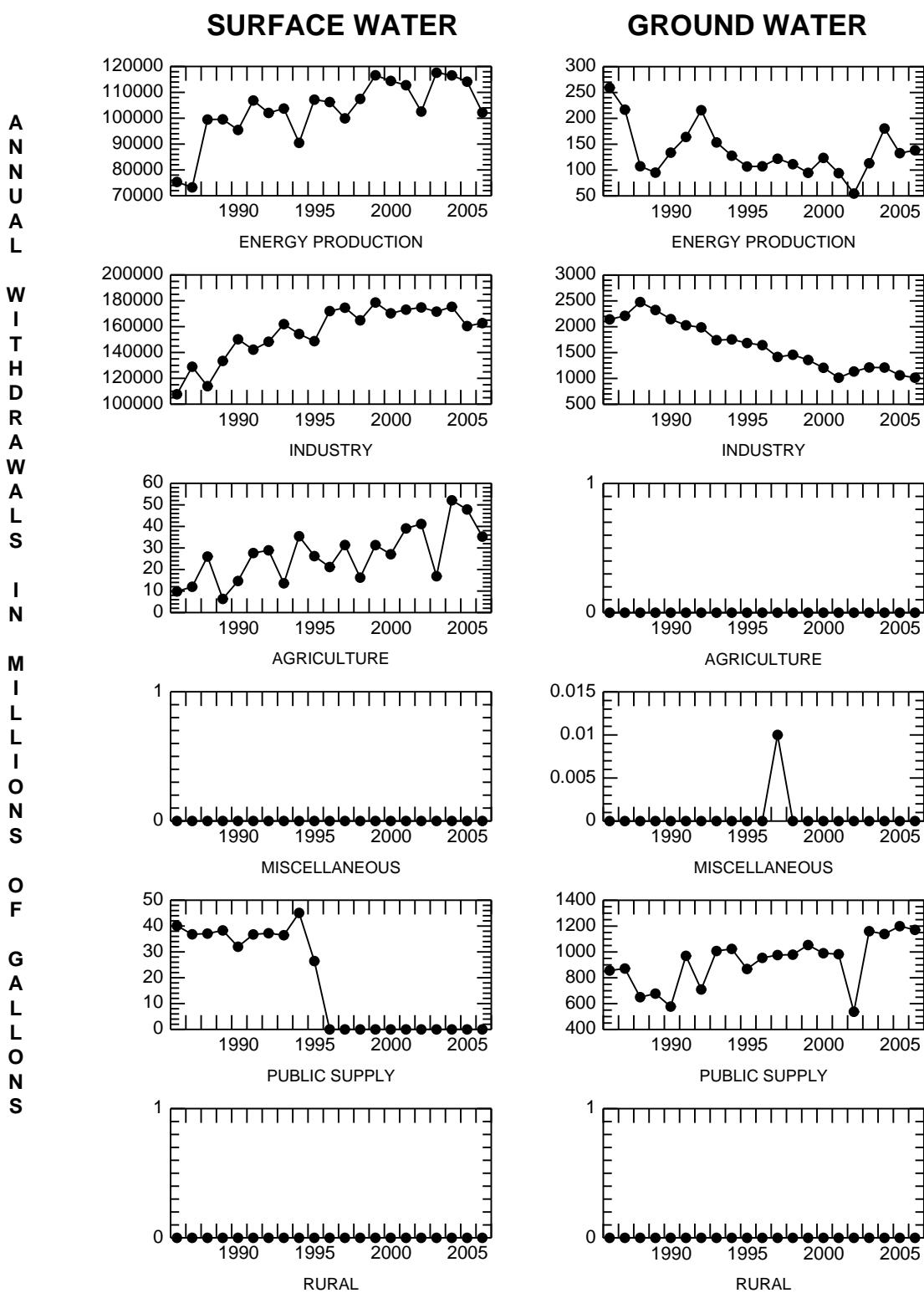
## Wabash County Reported Withdrawals, 1986-2006



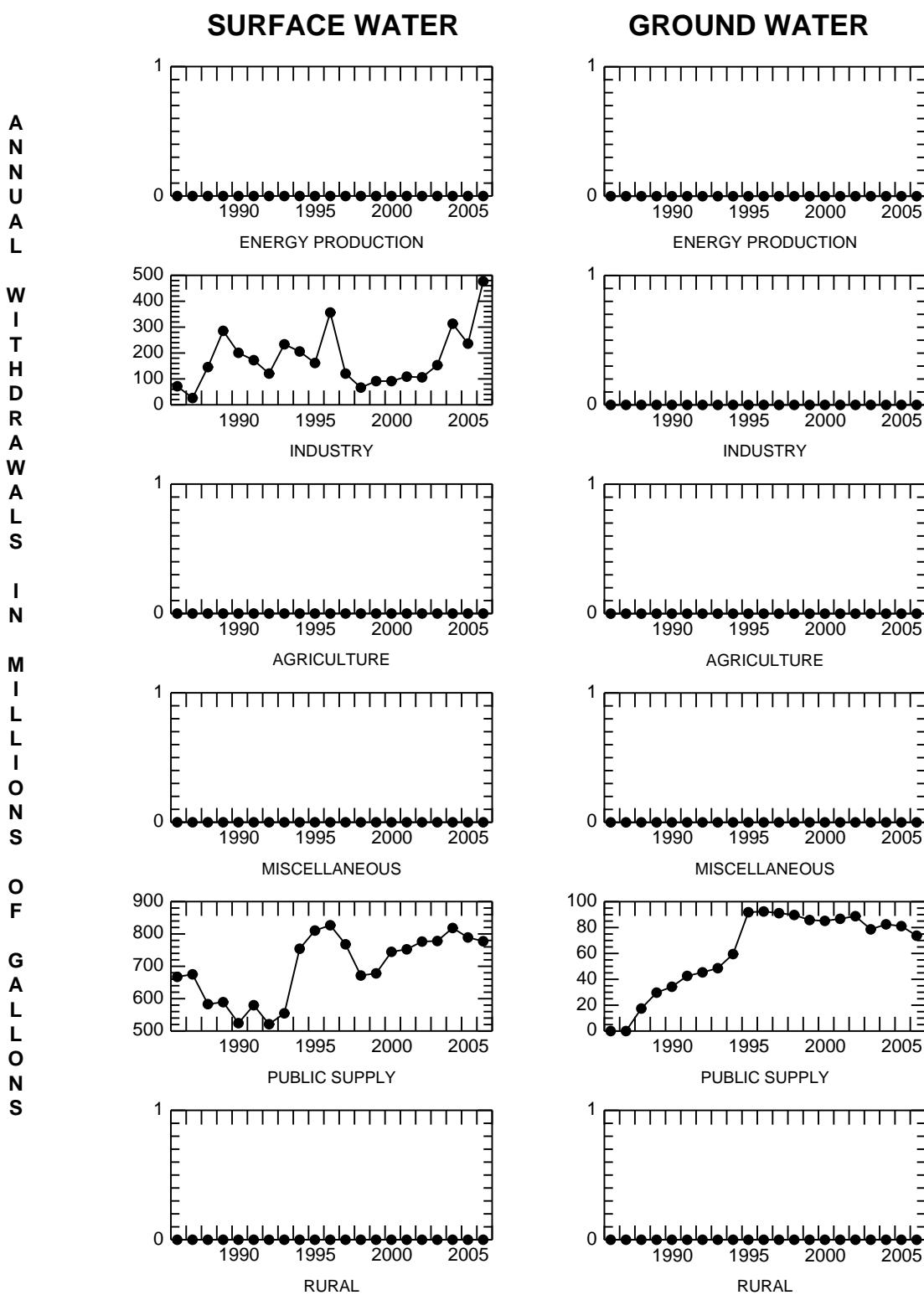
## Warren County Reported Withdrawals, 1986-2006



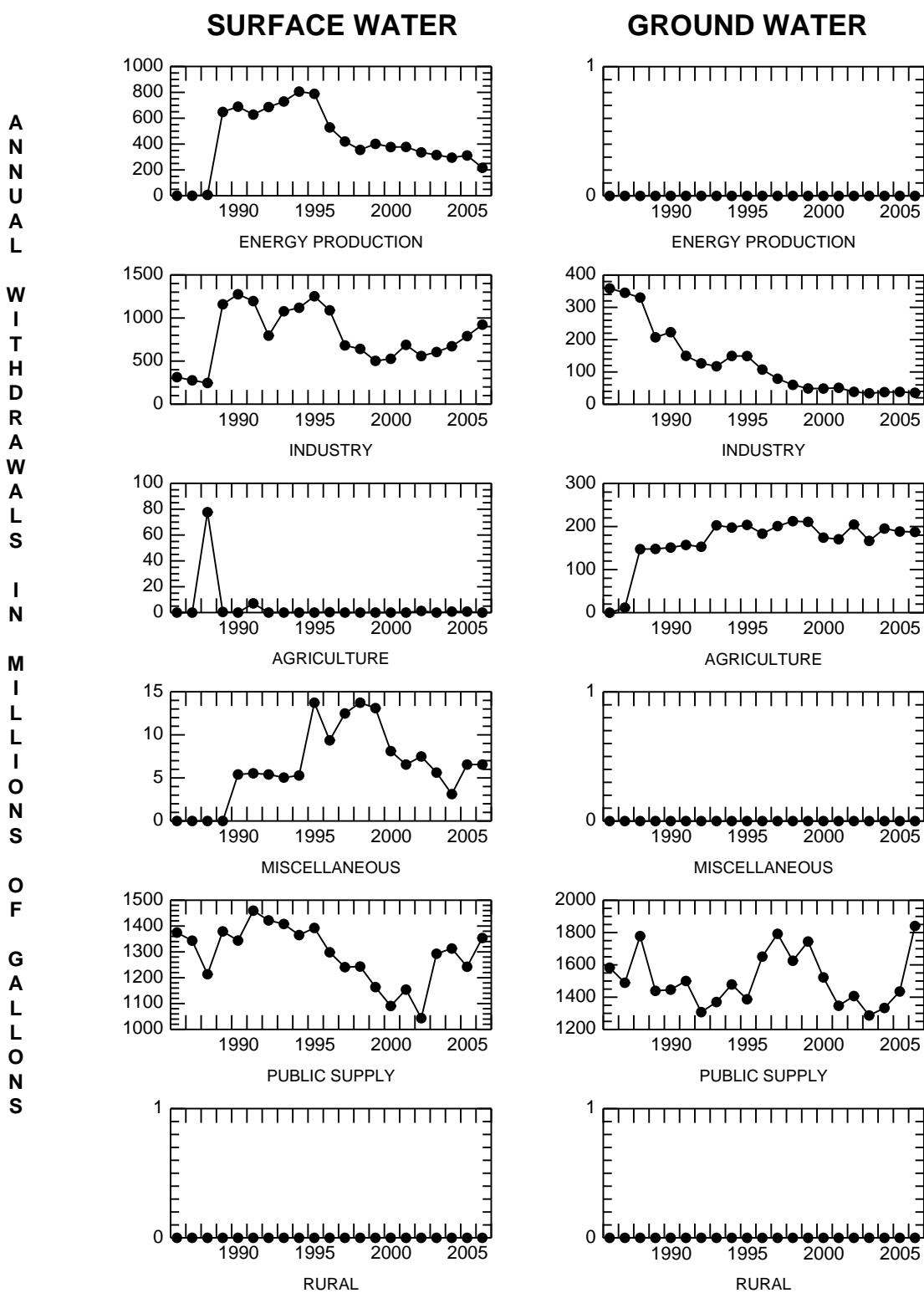
## Warrick County Reported Withdrawals, 1986-2006



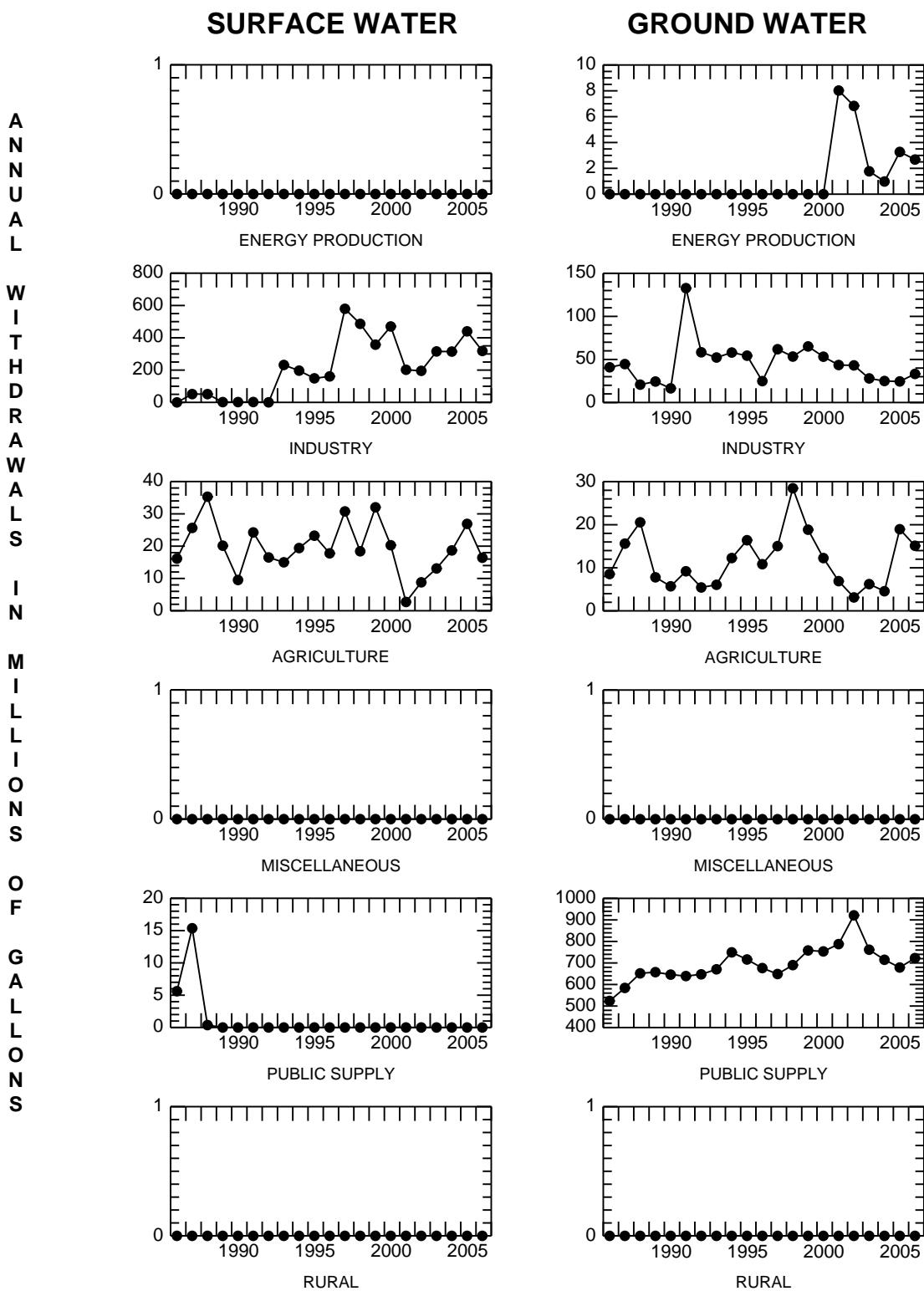
## Washington County Reported Withdrawals, 1986-2006



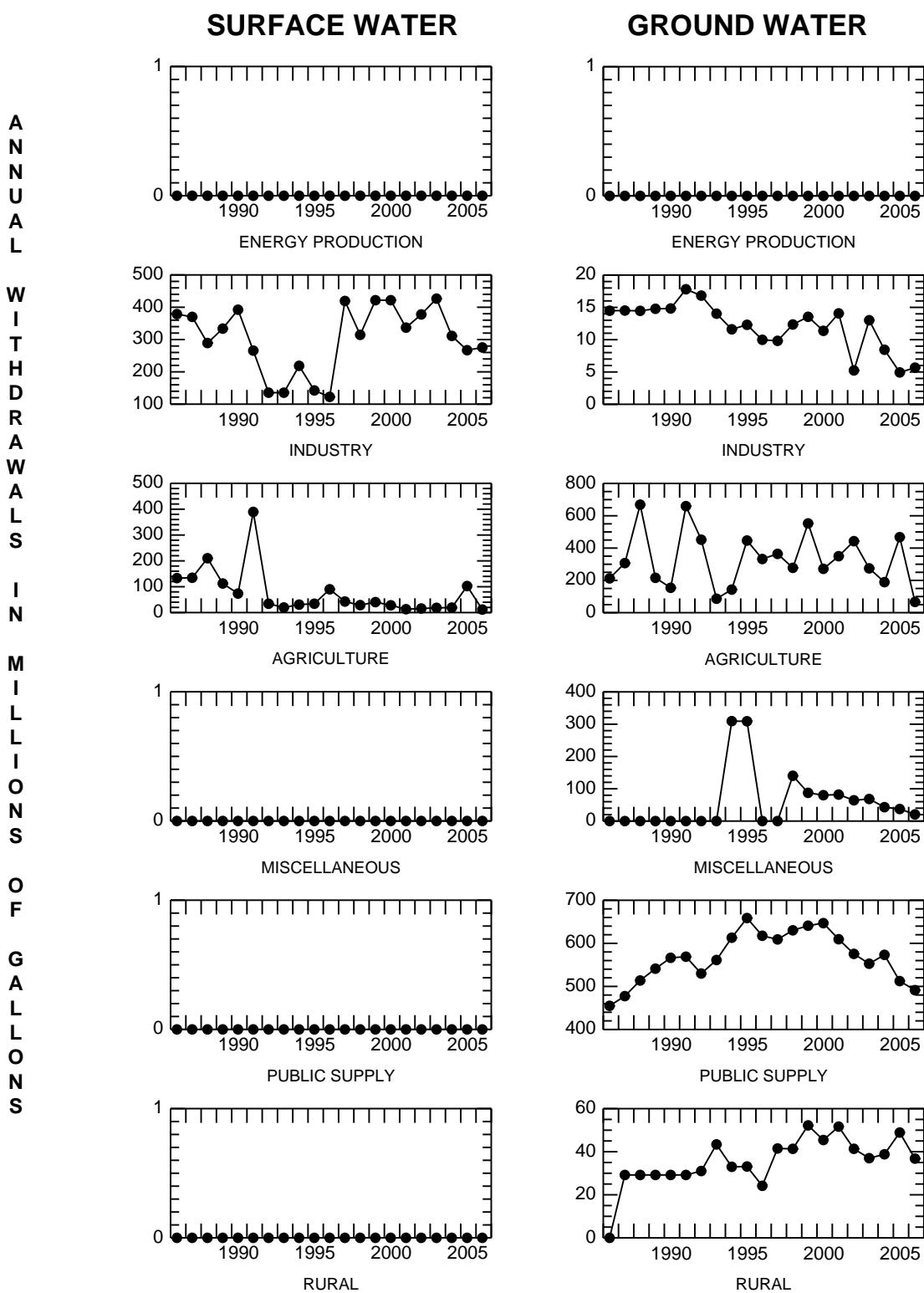
## Wayne County Reported Withdrawals, 1986-2006



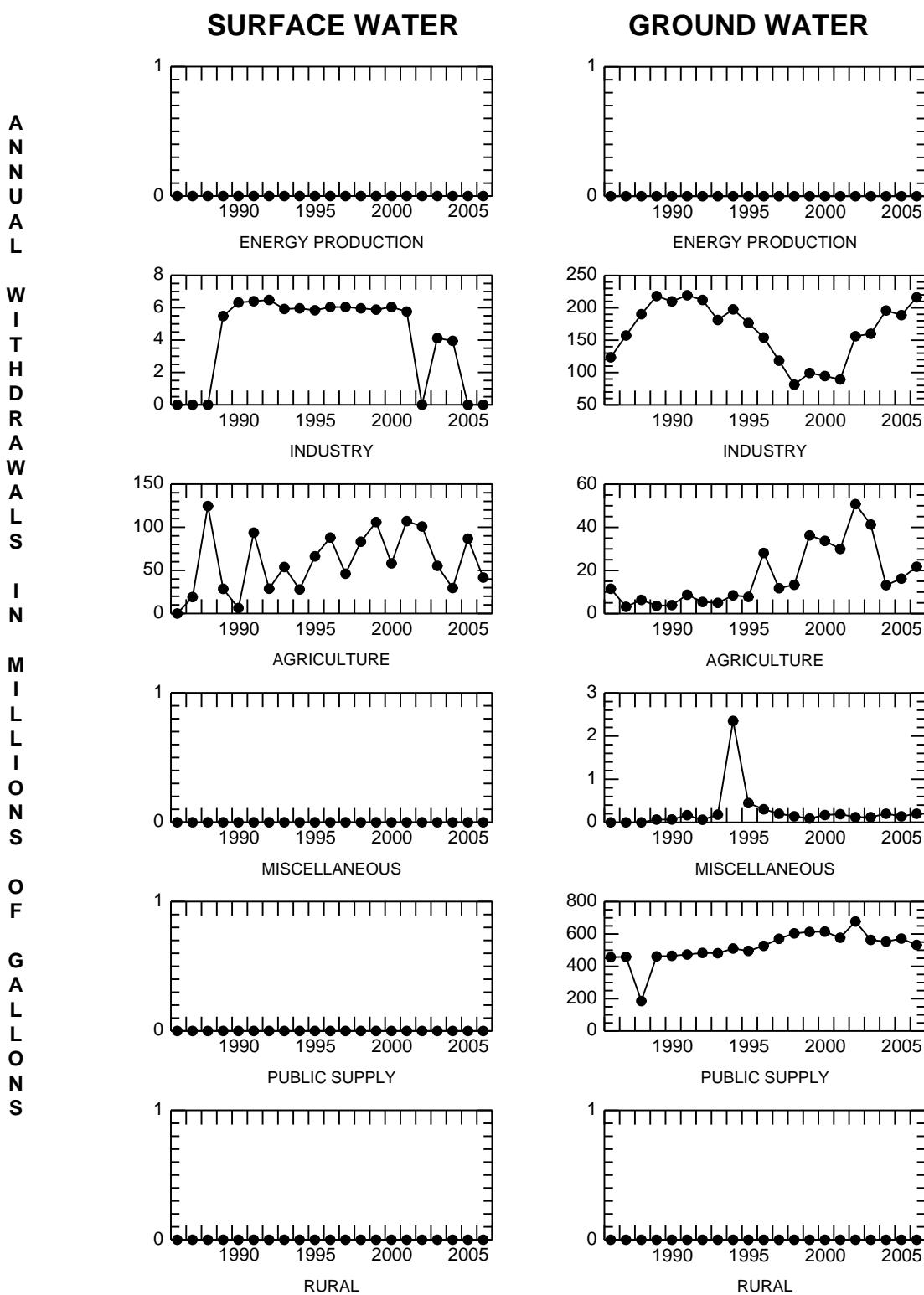
## Wells County Reported Withdrawals, 1986-2006



## White County Reported Withdrawals, 1986-2006



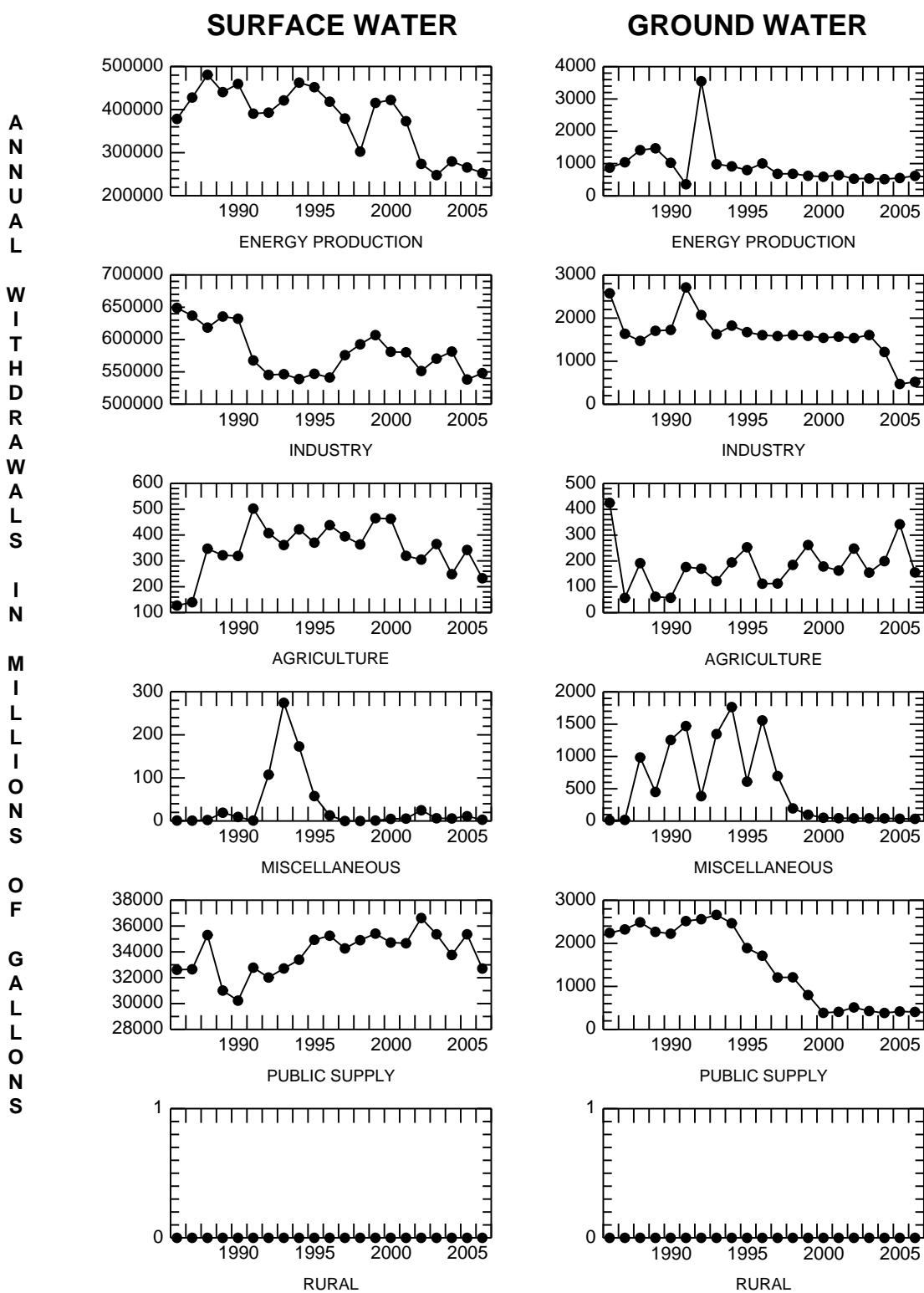
## Whitley County Reported Withdrawals, 1986-2006



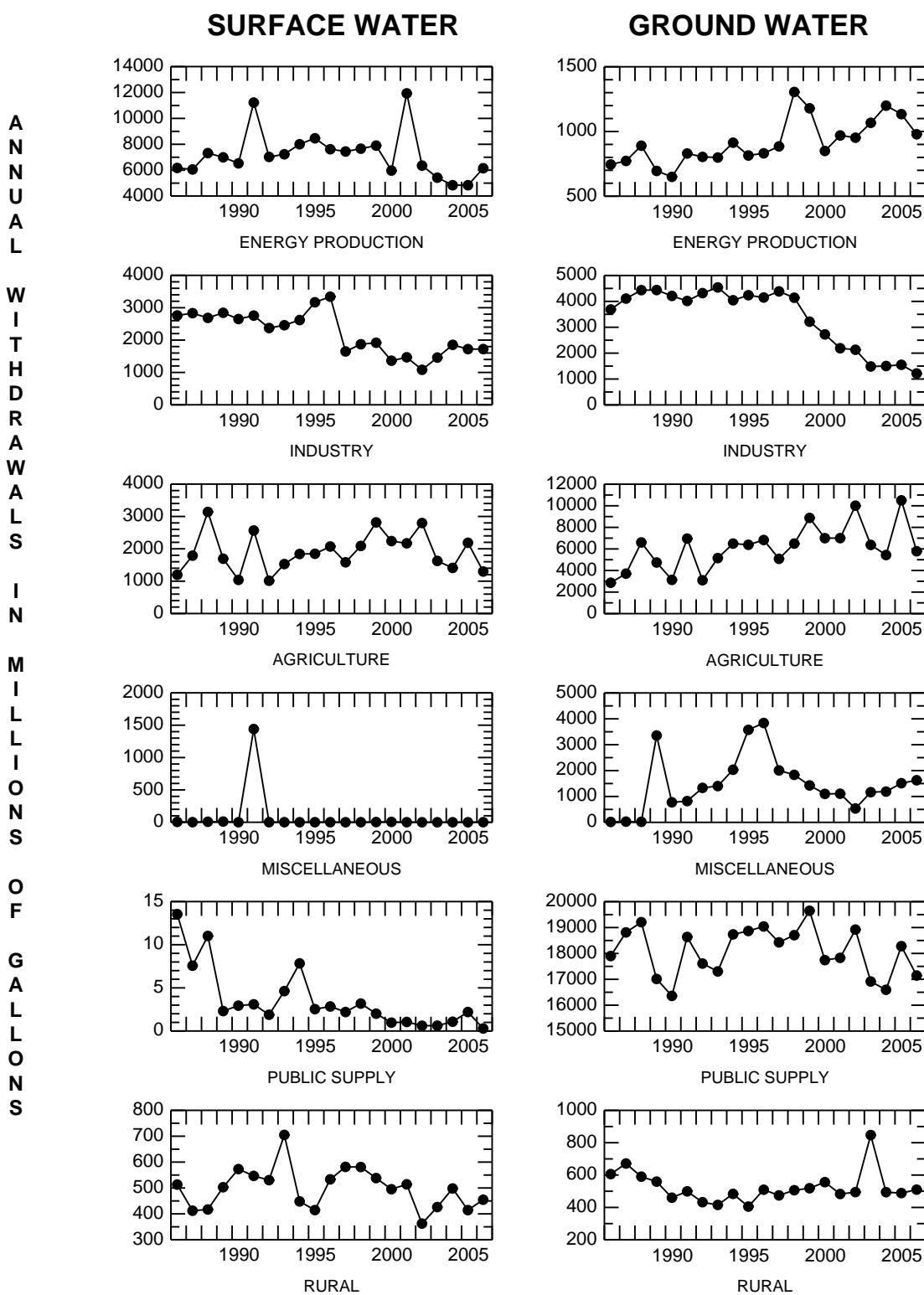
# **Water Management Basin**

## **Data**

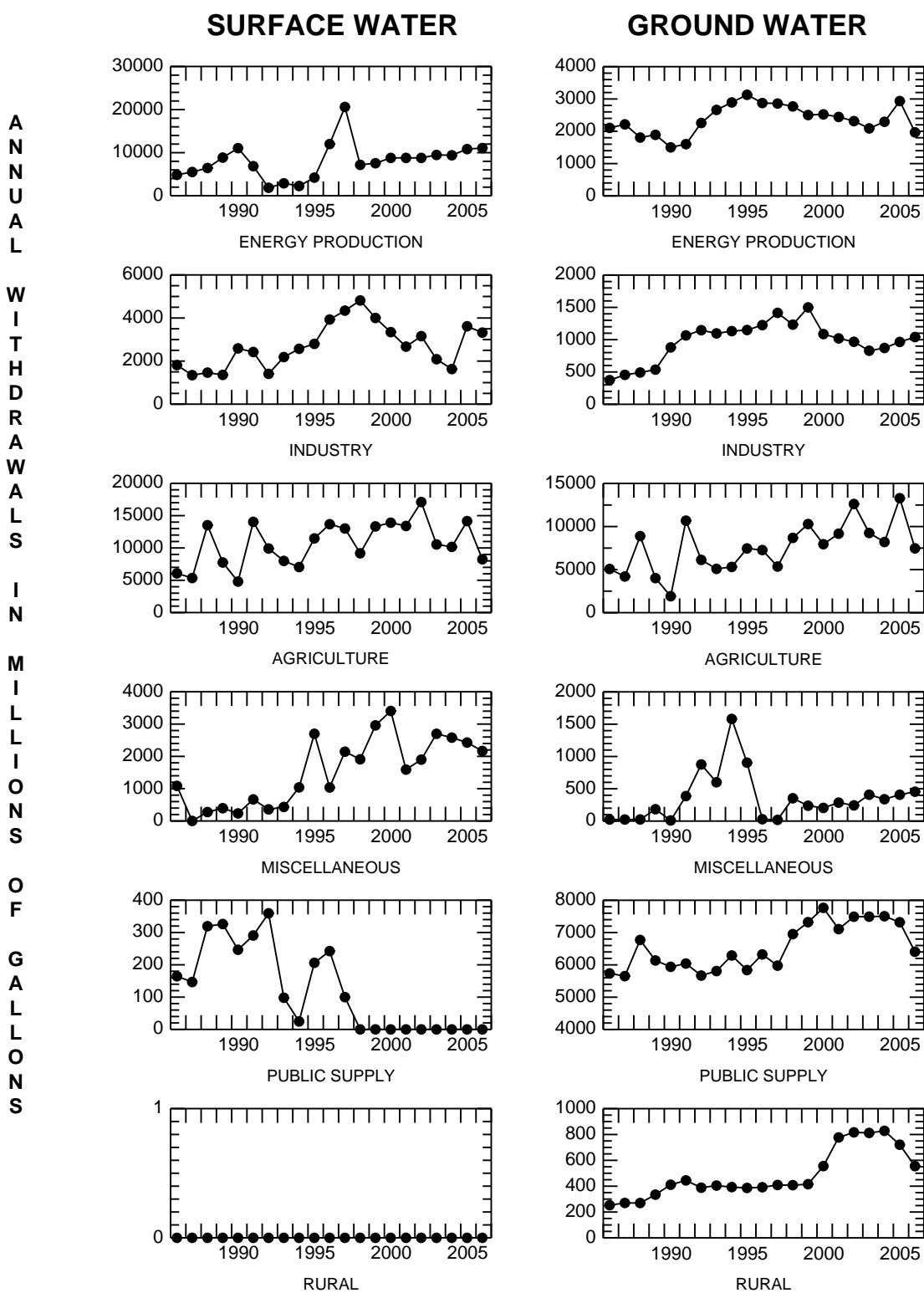
## Lake Michigan Basin Reported Withdrawals, 1986-2006



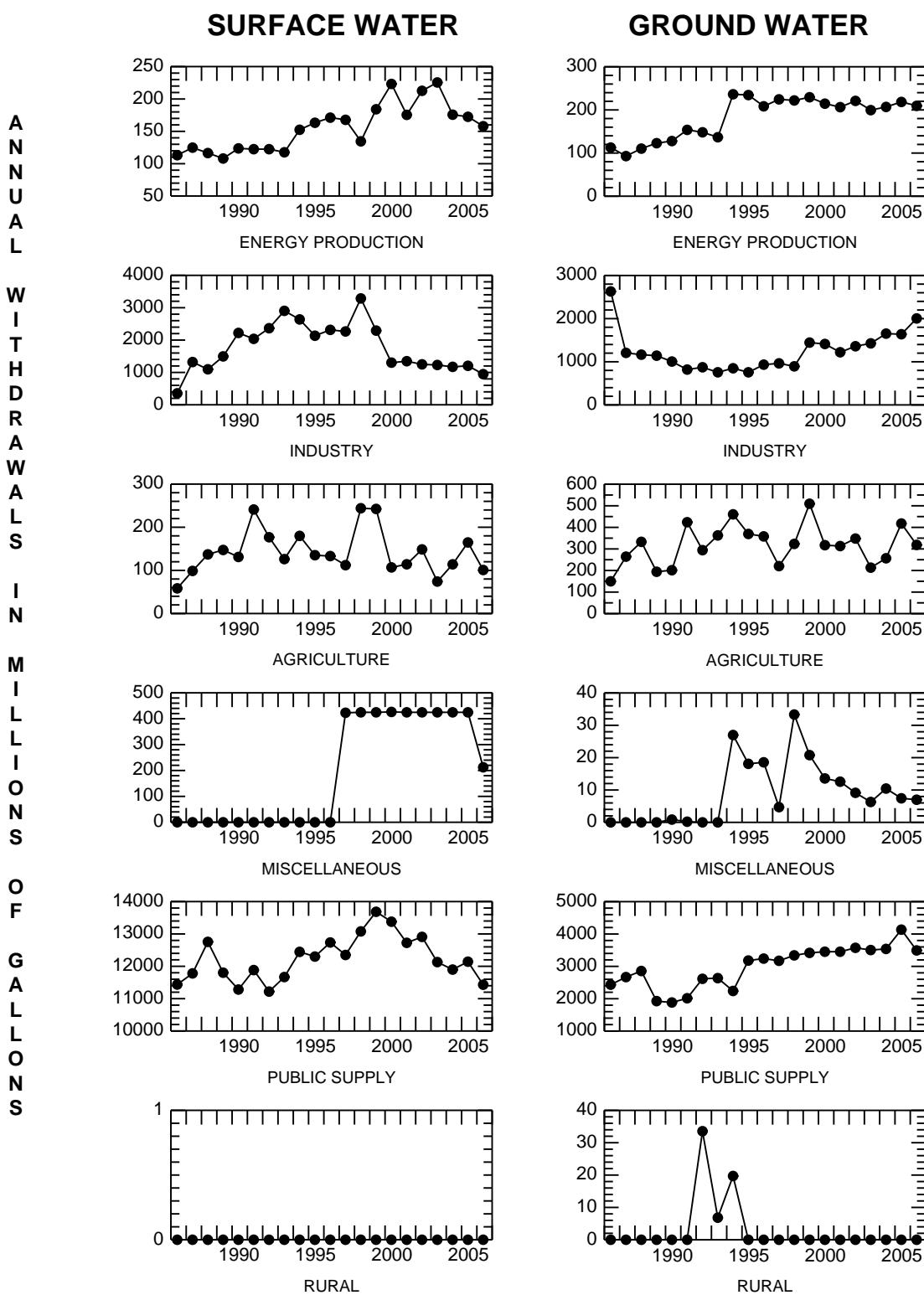
## St. Joseph River Basin Reported Withdrawals, 1986-2006



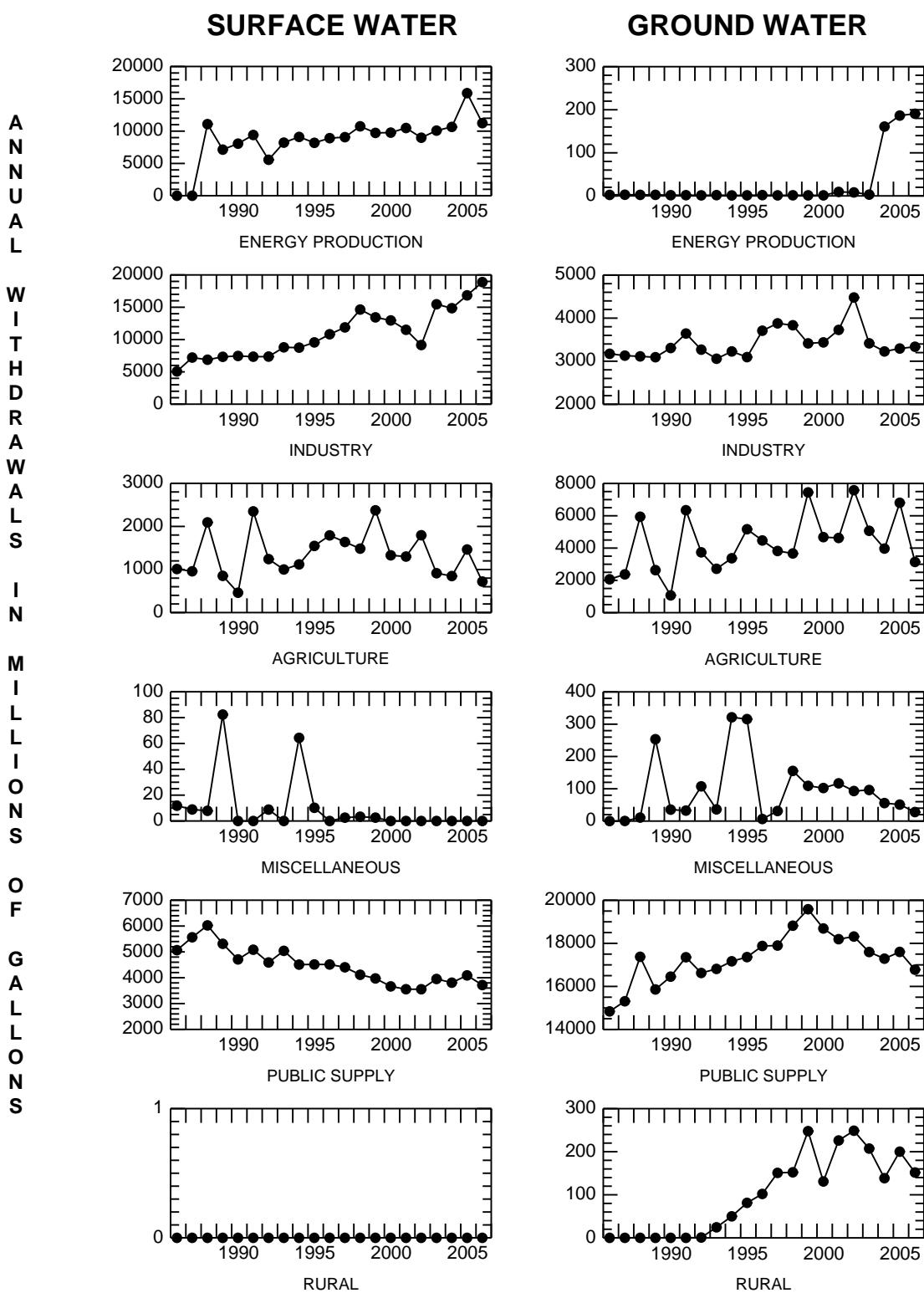
## Kankakee River Basin Reported Withdrawals, 1986-2006



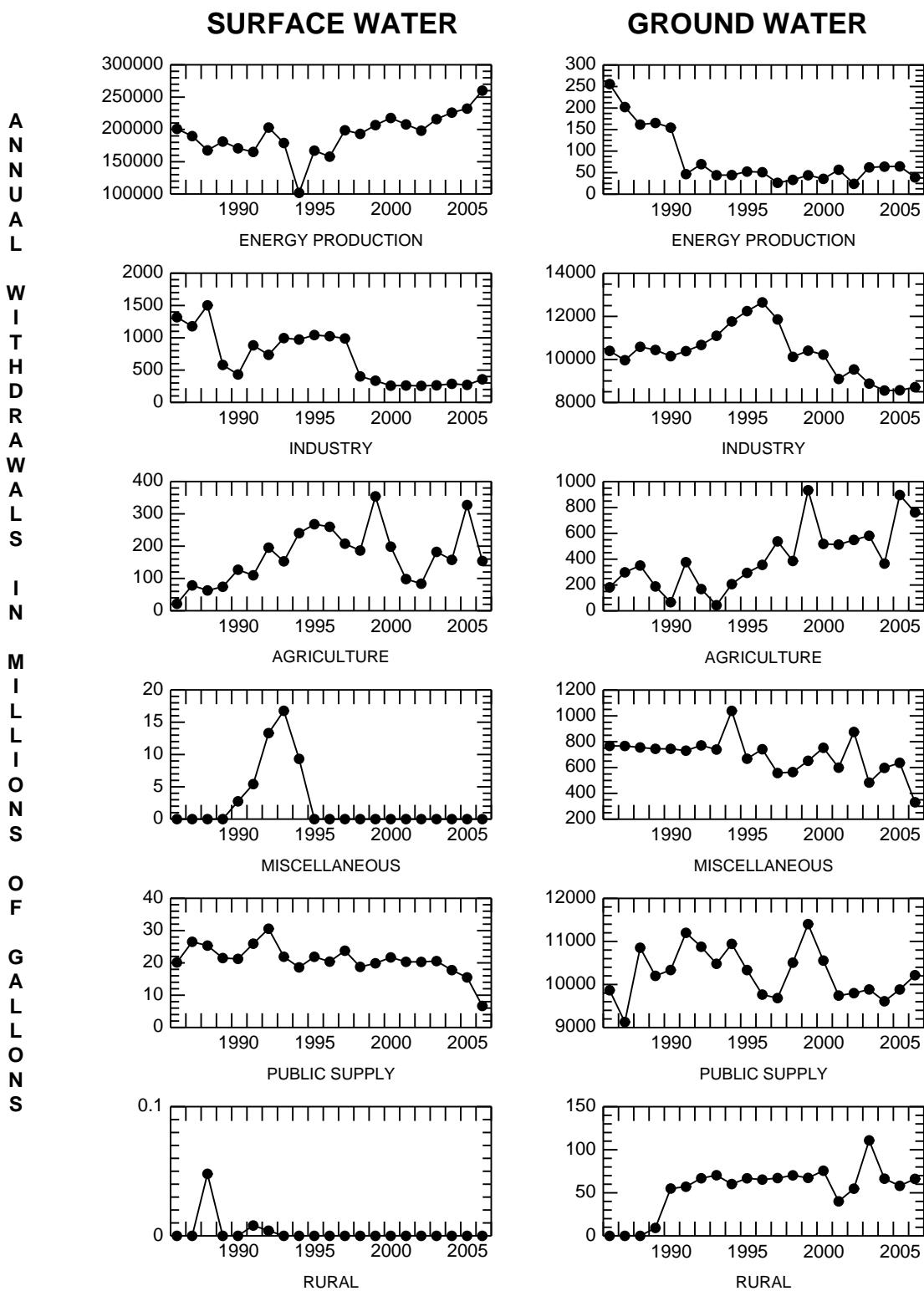
## Maumee River Basin Reported Withdrawals, 1986-2006



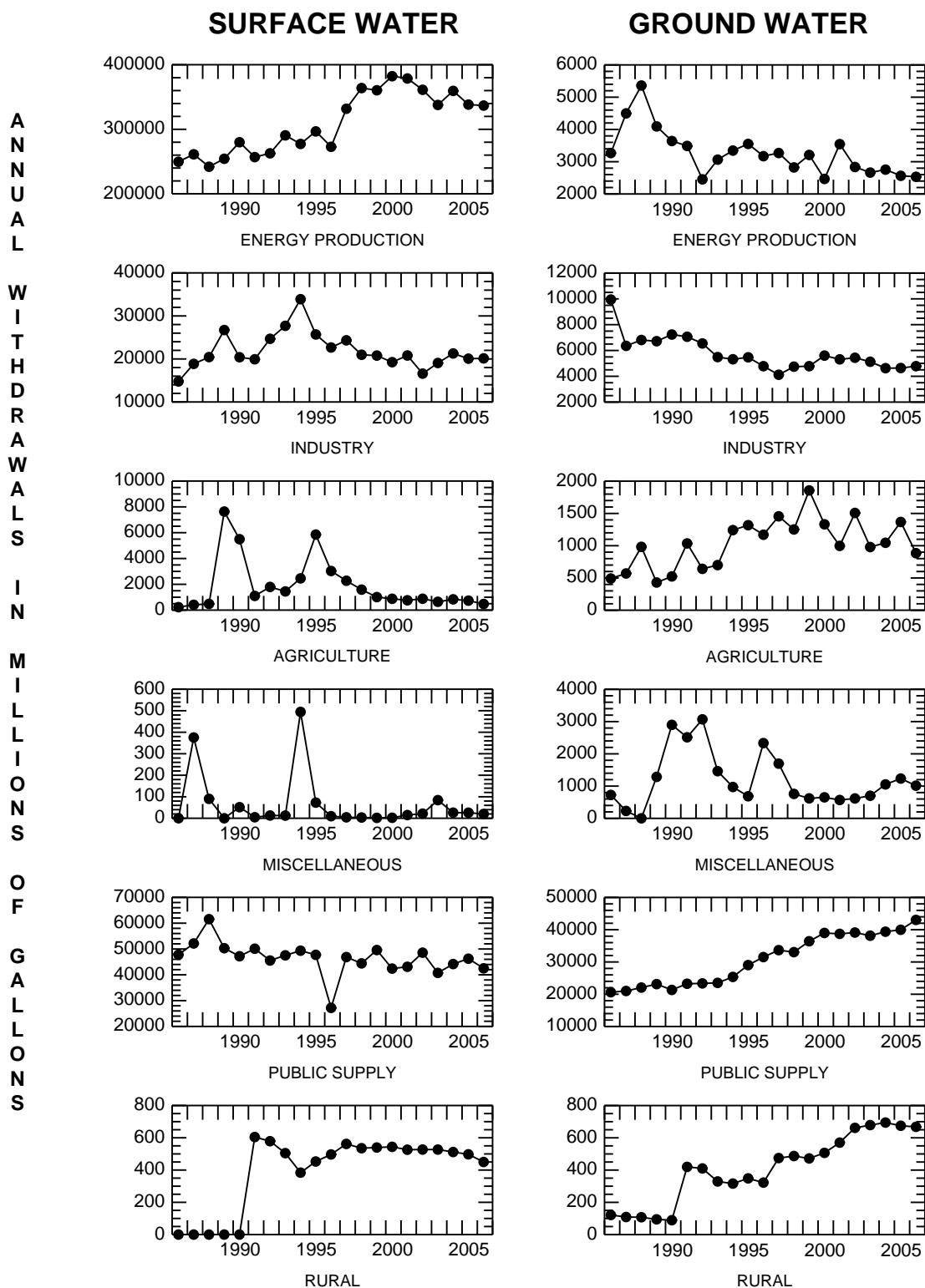
## Upper Wabash River Basin Reported Withdrawals, 1986-2006



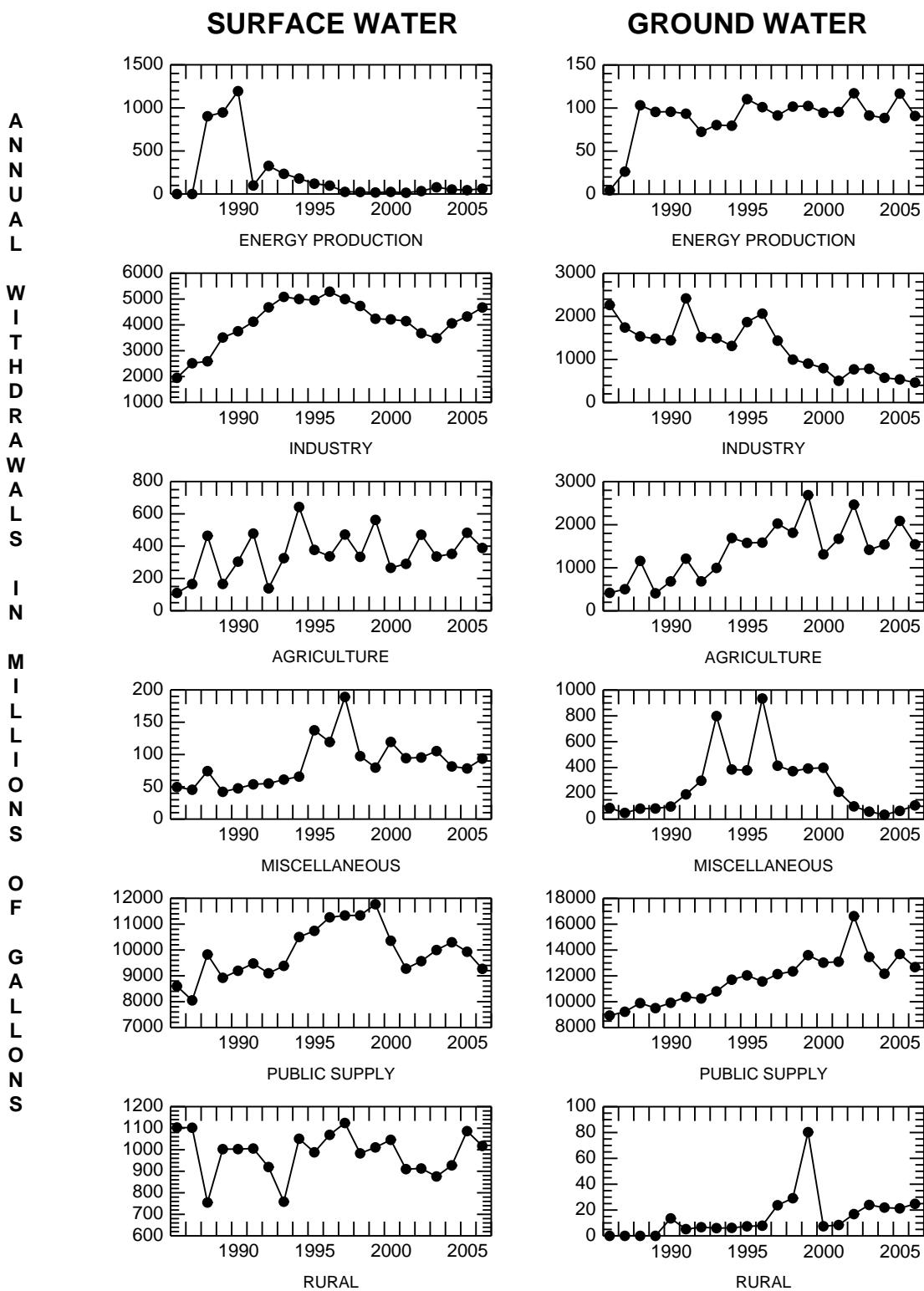
## Middle Wabash River Basin Reported Withdrawals, 1986-2006



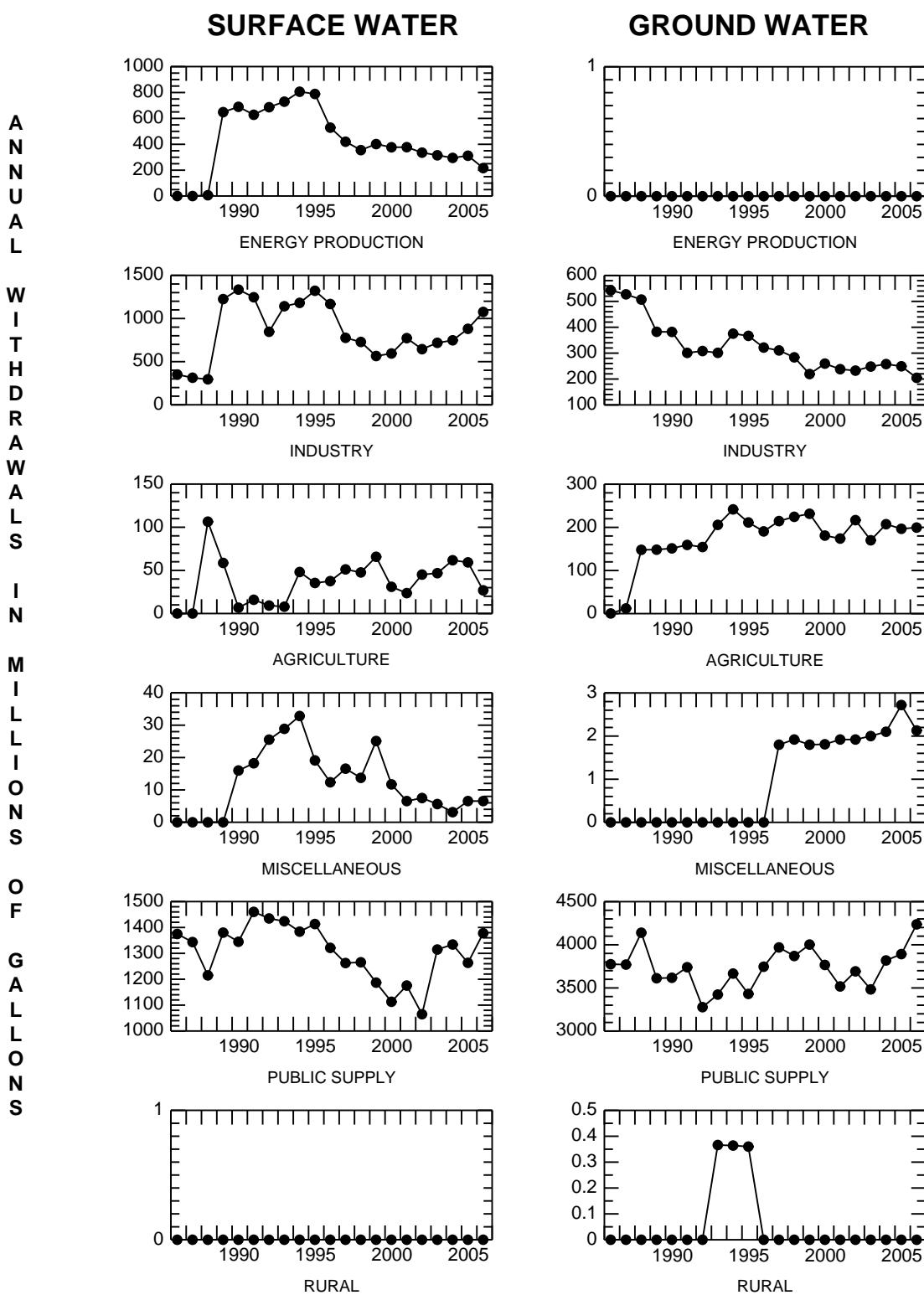
## White and West Fork White River Basin Reported Withdrawals, 1986-2006



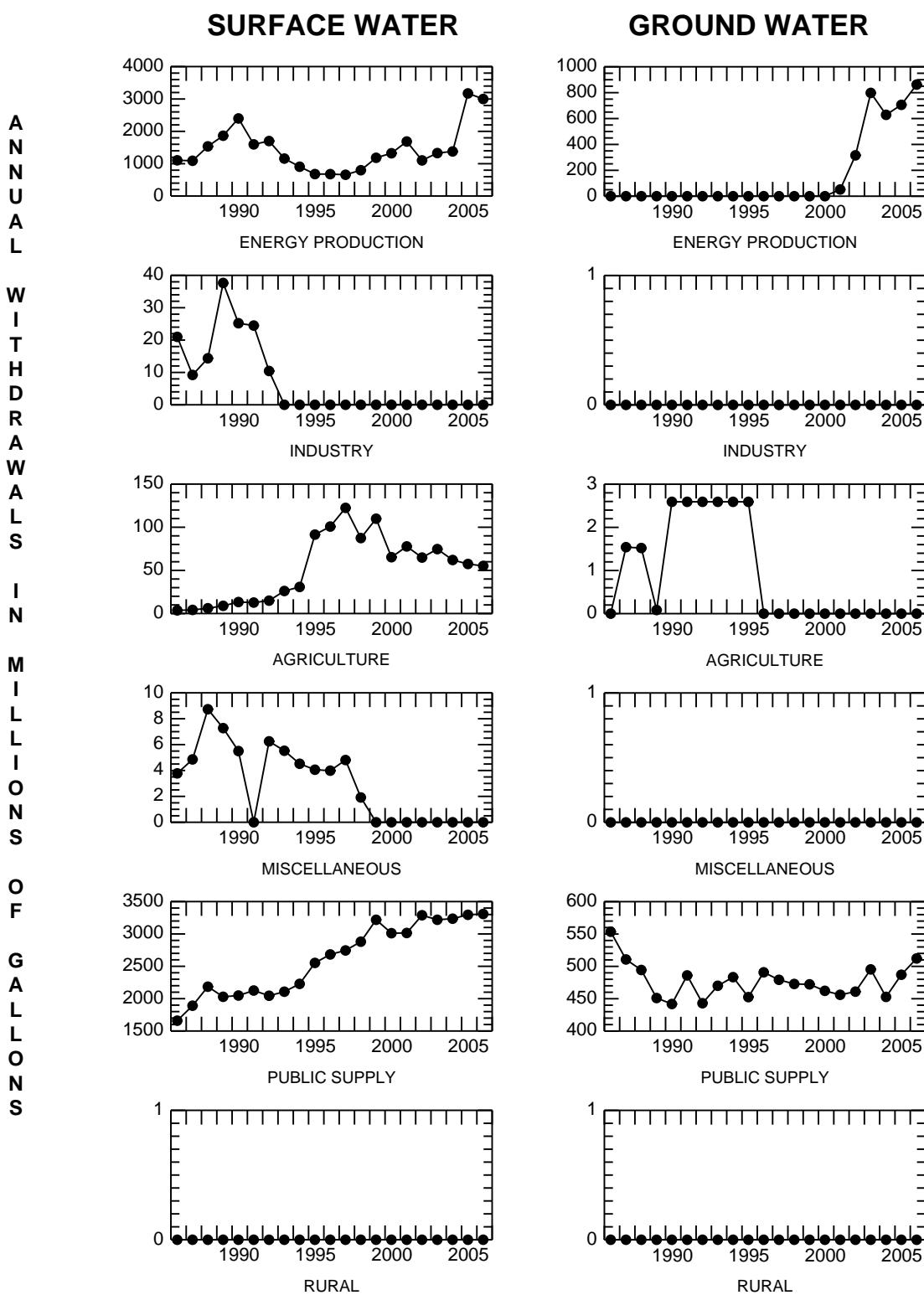
## East Fork White River Basin Reported Withdrawals, 1986-2006



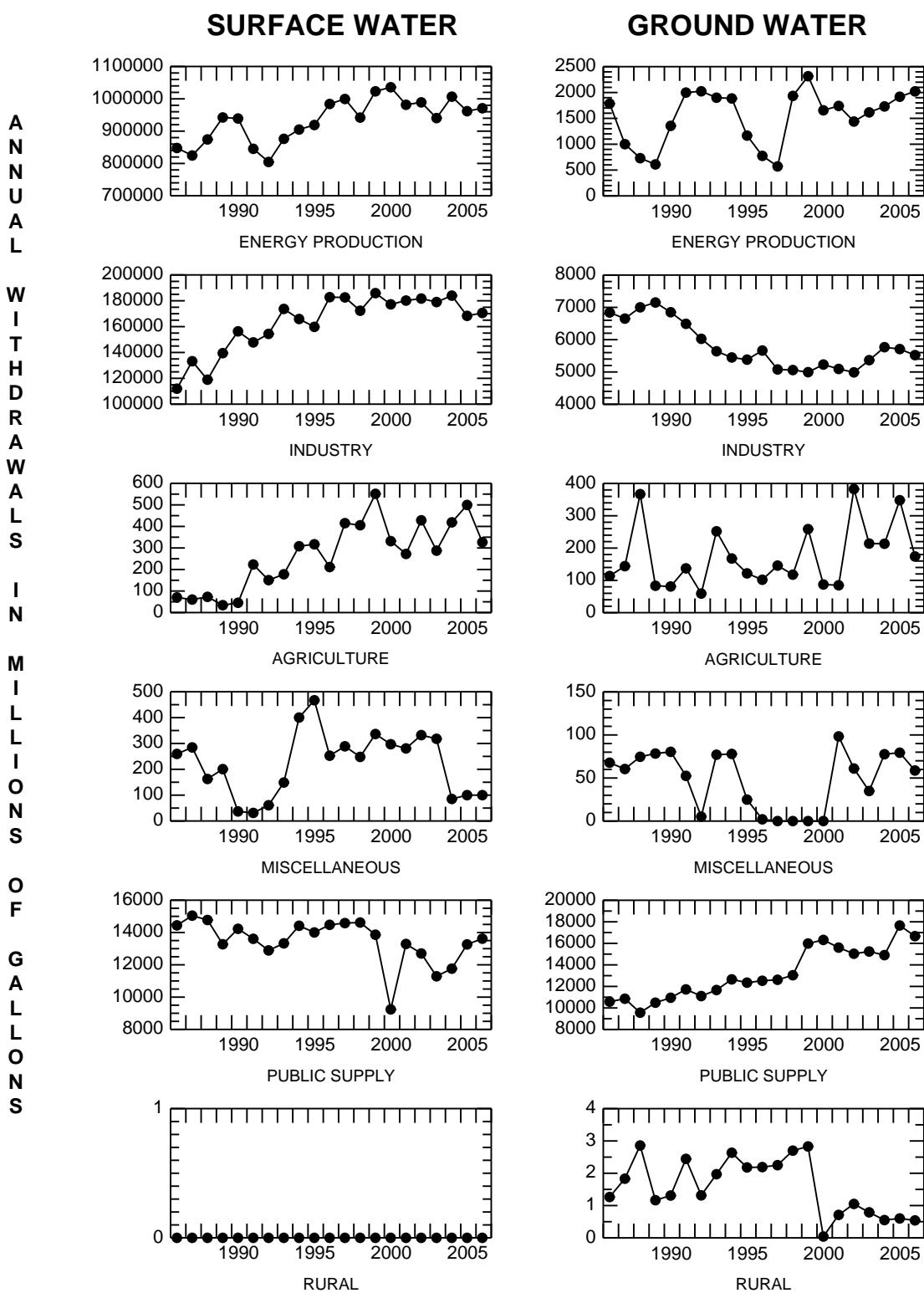
## Whitewater River Basin Reported Withdrawals, 1986-2006



## Patoka River Basin Reported Withdrawals, 1986-2006



## Ohio River Basin Reported Withdrawals, 1986-2006



## Lower Wabash River Basin Reported Withdrawals, 1986-2006

